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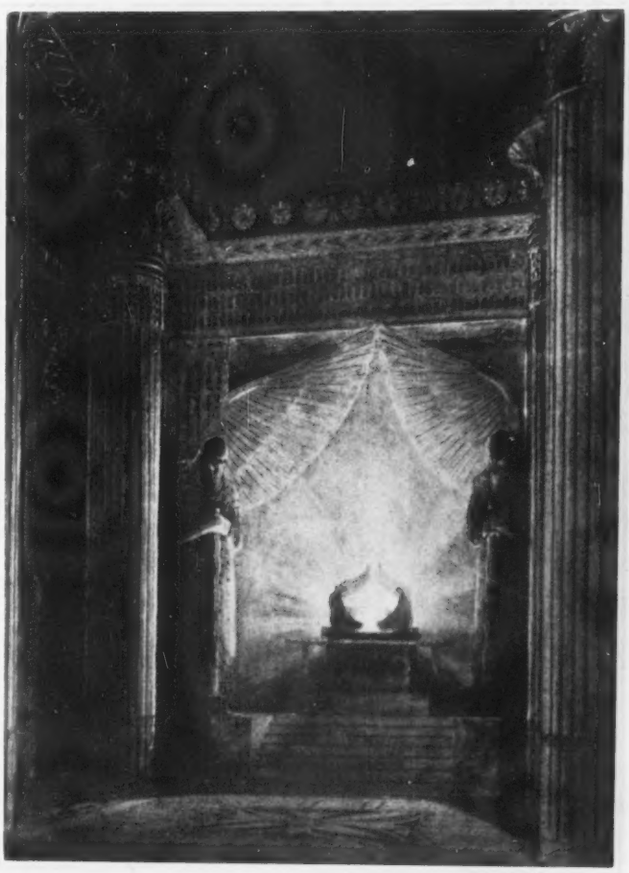
PENCIL POINTS

A JOURNAL FOR THE DRAFTING ROOM



RENDERING BY HUGH FERRISS OF THE MOST HOLY PLACE
KING SOLOMON'S TEMPLE. RESTORATION BY DR. JOHN W. KELCHNER
HELMLE AND CORBETT, ARCHITECTS

NOVEMBER 1925

VOLUME VI

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NUMBER 11

Feature Articles—Charles Z. Klauder, Master Draftsmen, XV; Restoration of King Solomon's Temple and Citadel

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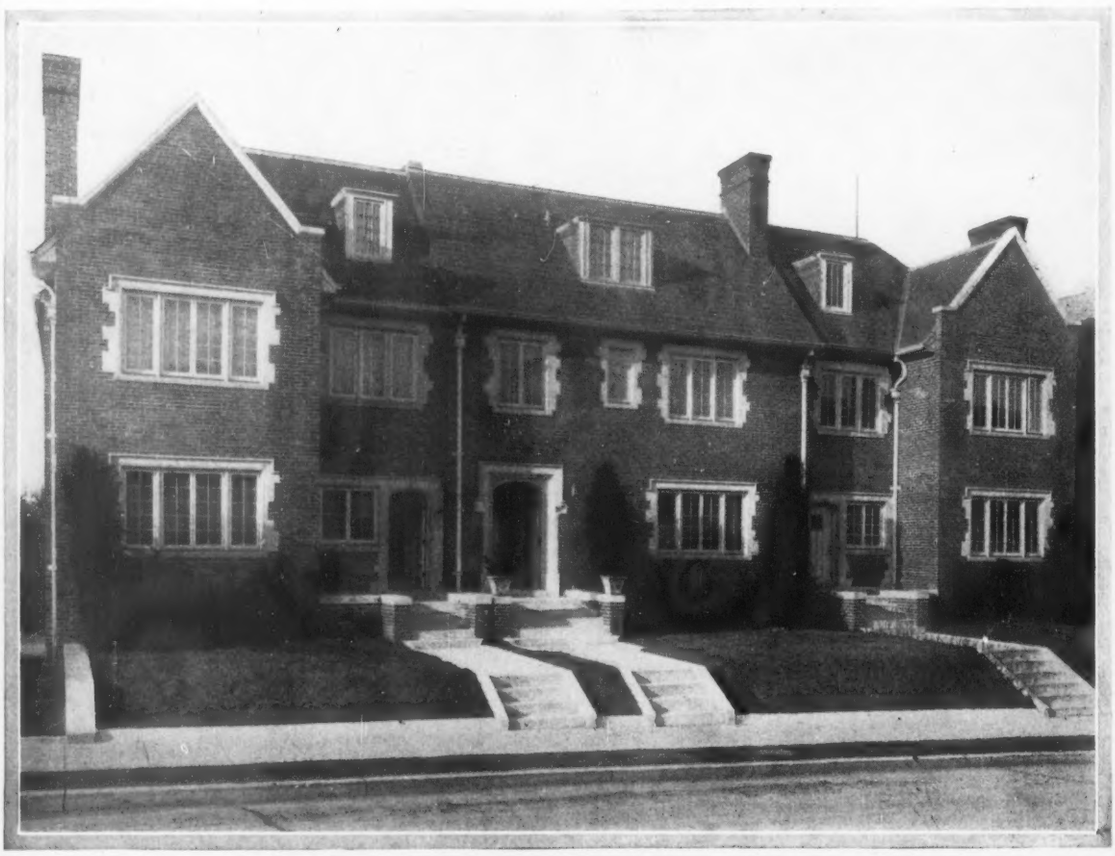

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PENCIL POINTS

VOLUME VI NOVEMBER, 1925 NUMBER 11

RUSSELL WHITEHEAD BECOMES EDITOR OF PENCIL POINTS

IT IS with pleasure that we announce to our readers that Mr. Whitehead, for many years prominently identified with architectural publishing in this country, has assumed the editorial direction of this paper.

Most architects are familiar with Mr. Whitehead's many-sided activities in this field, but for the benefit of some, especially of the younger generation, it may not be amiss briefly to outline Mr. Whitehead's achievements.

Something over fifteen years ago Mr. Whitehead, having completed his studies at Princeton and Drexel and having served his apprenticeship over the drafting-board, opened an office in New York for the practice of his profession. Almost before he had a chance to sharpen his pencil and get ready for business he was offered and accepted the editorship of *The Architectural Record*, with which the writer had the honor of being connected at that time. His achievements in that position were considerable as his taste in selecting material and his skill in presenting it, both pictorially and typographically, established a new standard for those times. We moved together in 1912 to become interested as part owners of *The Brickbuilder*, which subsequently became and now is known as *The Architectural Forum*. It may be said that Mr. Whitehead's editorial talents were in no small degree responsible for the success of that journal, as under his direction the scope of the publication was broadened to include not only architecture of burnt clay but also of other materials used to interpret the designs of that day.

Ten years ago Mr. Whitehead's ability as a publisher came to the attention of the White Pine Bureau, a powerful organization which desired to bring about a better understanding of its products through the establishment of a publication which would appeal strongly, because of its merit, to members of the architectural profession.

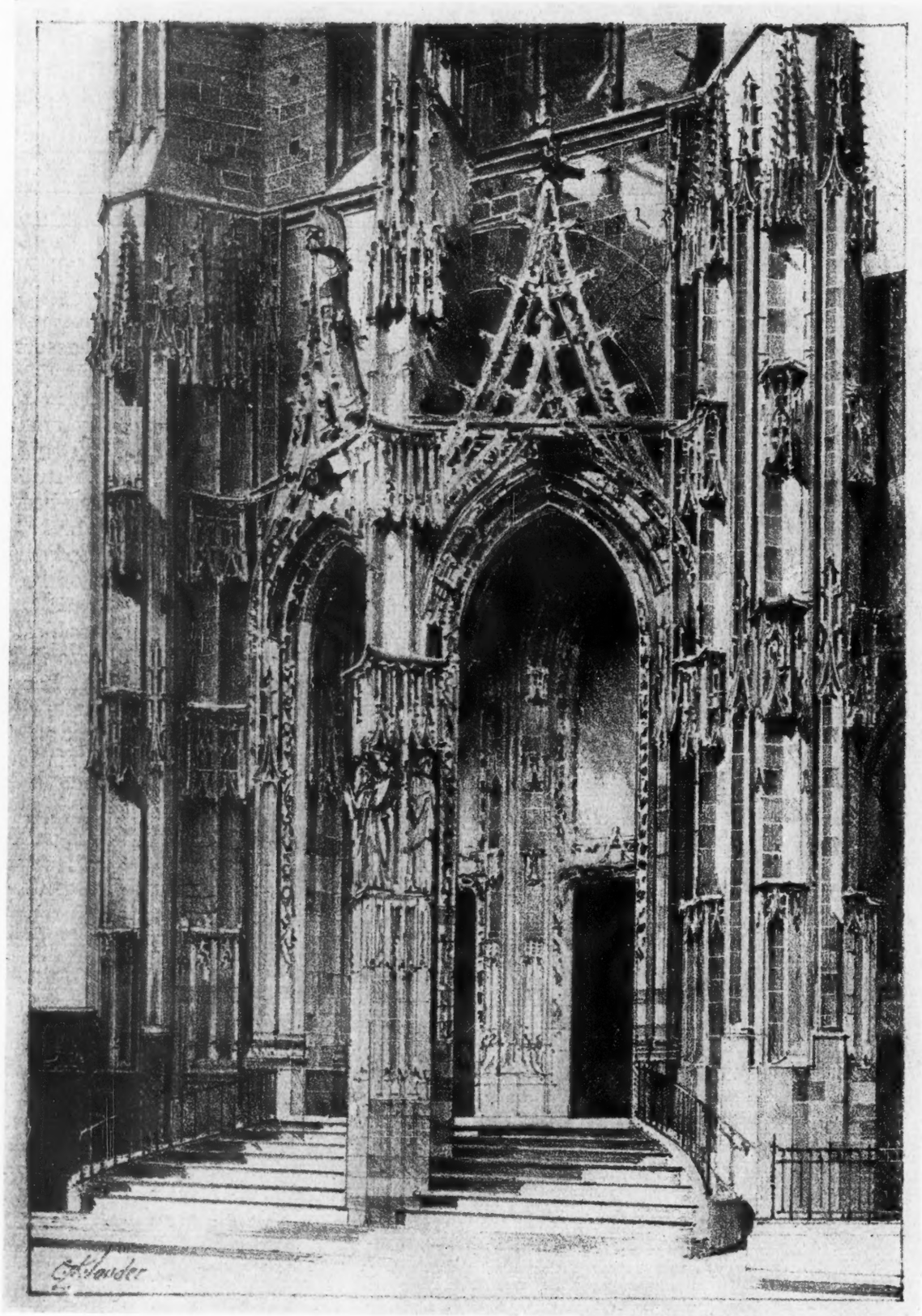
The White Pine Series of Architectural Monographs came into being at that time, Mr. Whitehead becoming the editor and publisher, acting for the White Pine Bureau. Practically every architect and draftsman in the country is familiar with this most valuable work which has been published without interruption since that time. Recently Mr. Whitehead has concluded an arrangement with the former sponsors of the White Pine Series whereby he becomes outright the owner of the publication, and which he now publishes at a subscription price as a personal enterprise, in no manner connected with the activities of The Pencil Points Press. Having built up an organization to take care of the details of his publishing business he finds it possible to take charge of the editorial department of PENCIL POINTS. He brings to this work a wealth of publishing experience which will, without doubt, be favorably reflected in these pages.

Not only am I sure that the high standards which we have already established for our work will be still further improved upon, but it is a source of personal gratification to be once more actively associated with a man with whom I have worked so pleasantly in the past.

Mr. Whitehead is anxious to hear from all readers of PENCIL POINTS who have suggestions to make regarding useful editorial features for next year. Our policy of working closely with our readers so that we may render the maximum of service for the drafting-room will be followed, and suggestions of all kinds will be given most careful consideration and will be incorporated in future issues if deemed to be valuable to our field as a whole.

We predict even greater things for PENCIL POINTS with Mr. Whitehead to direct our editorial policy.

RALPH REINHOLD.



LITHOGRAPHIC CRAYON DRAWING BY CHARLES Z. KLAUDER

Entrance to Church St. Germain Argentan.

MASTER DRAFTSMEN, XV

CHARLES Z. KLAUDER

THE FORCE of genius is strikingly shown in the career of Charles Z. Klauder. The architect of the proposed Cathedral of Learning at Pittsburgh, of notable groups of buildings at Princeton, Wellesley, Yale, Cornell and at various other seats of learning, as well as of many buildings of the highest architectural character, has made his way by the possession of genius. It has enabled him to solve problem after problem in a distinctive and highly satisfactory way and to give an unusual degree of spirit to his buildings and to his drawings. This force has carried him upward and onward, for Klauder started his architectural career when a boy of fifteen by going to work in an architectural office and has acquired the high degree of scholarship which he possesses by his own effort—through his ability to absorb information, to sort it mentally and to incorporate what he found suited to his purpose into his equipment for the practice of architecture.

CHARLES Z. KLAUDER.

The origin of genius is often less clear than its operation. In the case of Mr. Klauder this is true, for his forbears on both sides were simple, capable, substantial people who showed no trace of genius within the two or three generations about which it is possible to learn anything definite. There is, of course, such a thing as a "throw back," in some cases, to an ancestor who exhibited marked ability. It seems most reasonable to assume that genius is the result of the possession by a person of a special combination of qualities which, working together, produce this quality. This does not necessarily call for any "throw back." A man may be the first in his line to have this fortunate combination of qualities. Perhaps that is the case with Klauder. Speculation on such a point as this is vain, the man's works are in evidence.

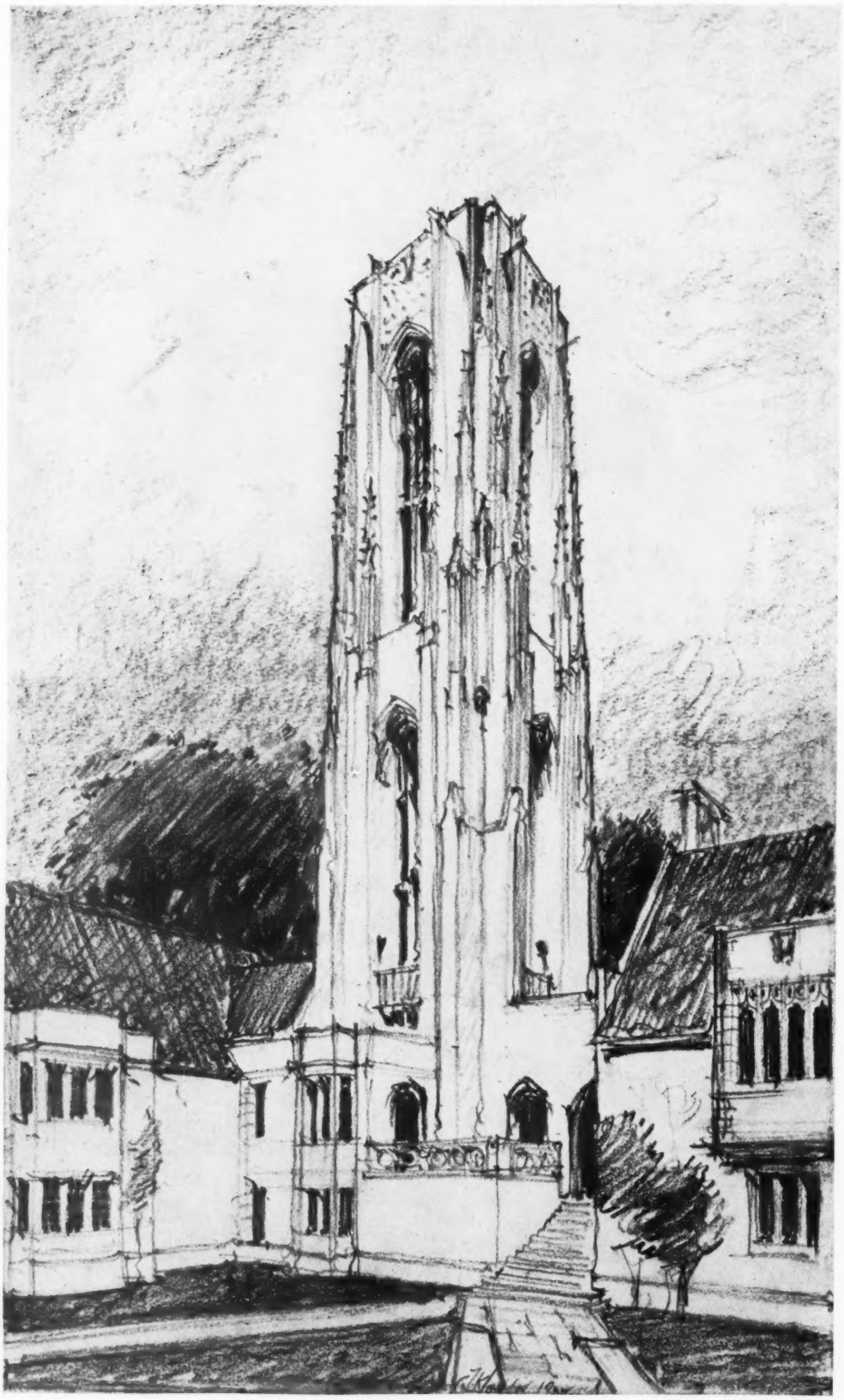
The careful training in drawing which he received when very young in classes conducted by the local Turnverein he considers of very great value to him. The work consisted largely in making careful copies of drawings of subjects shown on printed sheets prepared especially for this form of instruction. This probably had something to do with giving him the command of his hand that makes possible his remarkable freedom in drawing. Where a pupil of less ability would have found such copying deadening and a hopeless barrier to the cultivation of freedom at a later period, he evidently derived benefit from it and was able to use it as a stepping stone to further development.

Upon the completion of his course in grammar school, Klauder went to work at the age of fifteen in the office of Theophilus Chandler. He remained in that office about six years all together with the exception of short intervals during which he worked in other offices. He then entered the employ of Walter Cope with whom he remained for several years. He was engaged upon the plans for the Museum of Archaeology of the University of Pennsylvania. He spent several months in the office of Frank Miles Day and then went with George Keister, after which he traveled in Europe. Upon his return to this country he became once more connected with the office of Frank Miles Day, this time as chief draftsman. In 1910 he was admitted to partnership and the firm became Day Brothers & Klauder. In 1913, Frank Miles Day's brother withdrew and the firm became Day & Klauder. In 1918, Frank Miles Day died. Since that time Klauder has conducted the practice of the office under the firm name of Day & Klauder.

The facility with which Klauder sketches is one of his outstanding accomplishments. When a problem is presented to him he visualizes a solution and roughs it in on paper with a few strokes of a surprising effectiveness. An example of this method is a sketch he made at Wellesley to show his idea for the placing and general design of a group of proposed buildings. The sketch was made on the spot and unhesitatingly contained all the essentials of the finished design which did not show any change in the *parti*. It was all in the first rough sketch, so well conceived that further study was only a matter of detail and draftsmanship.

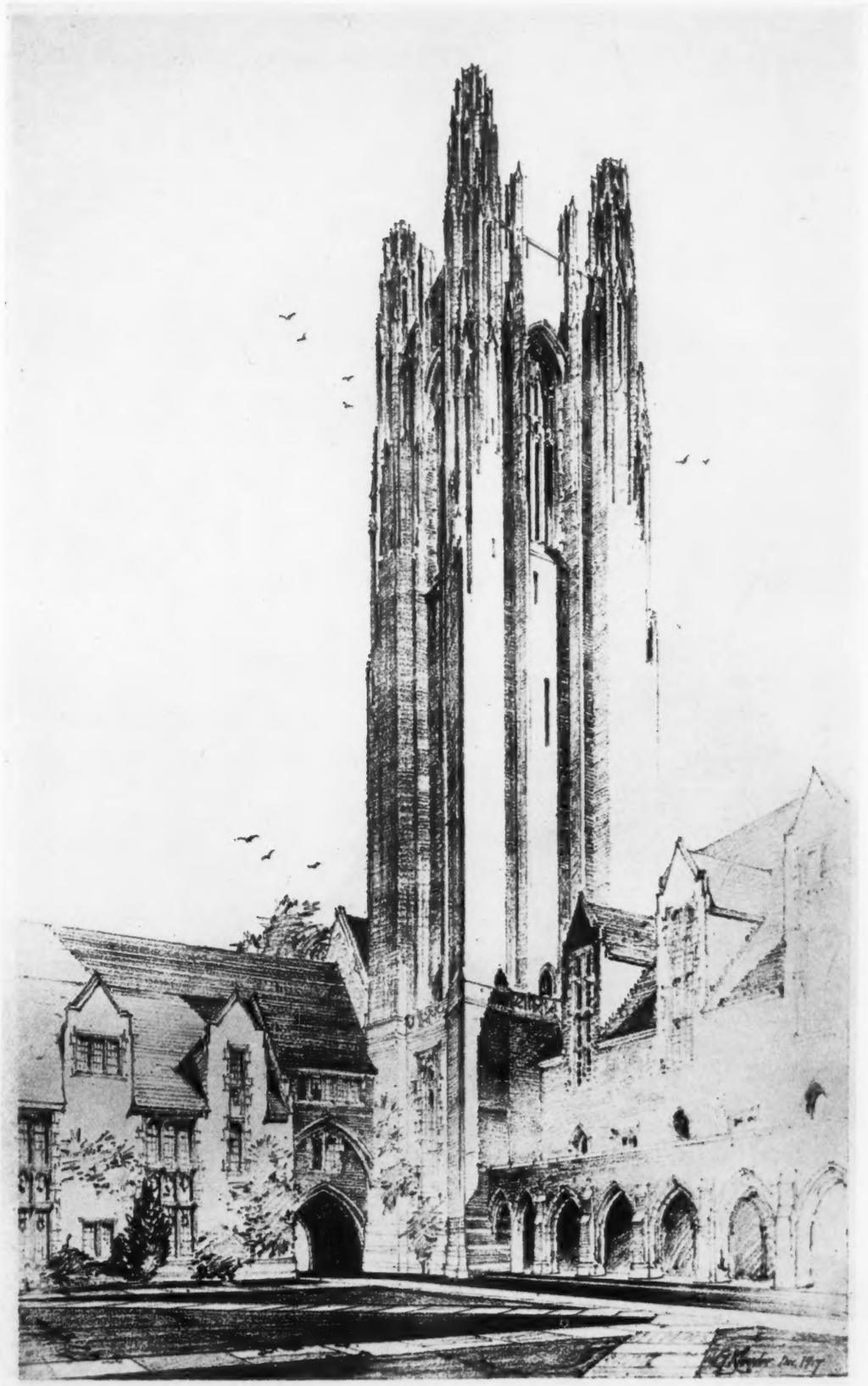
A type of drawing that Klauder employs to great advantage is that shown on page 44, the "Tower, Concordia Seminary, St. Louis." This drawing was made in red crayon on tracing vellum over a care-

(Continued on page 49)

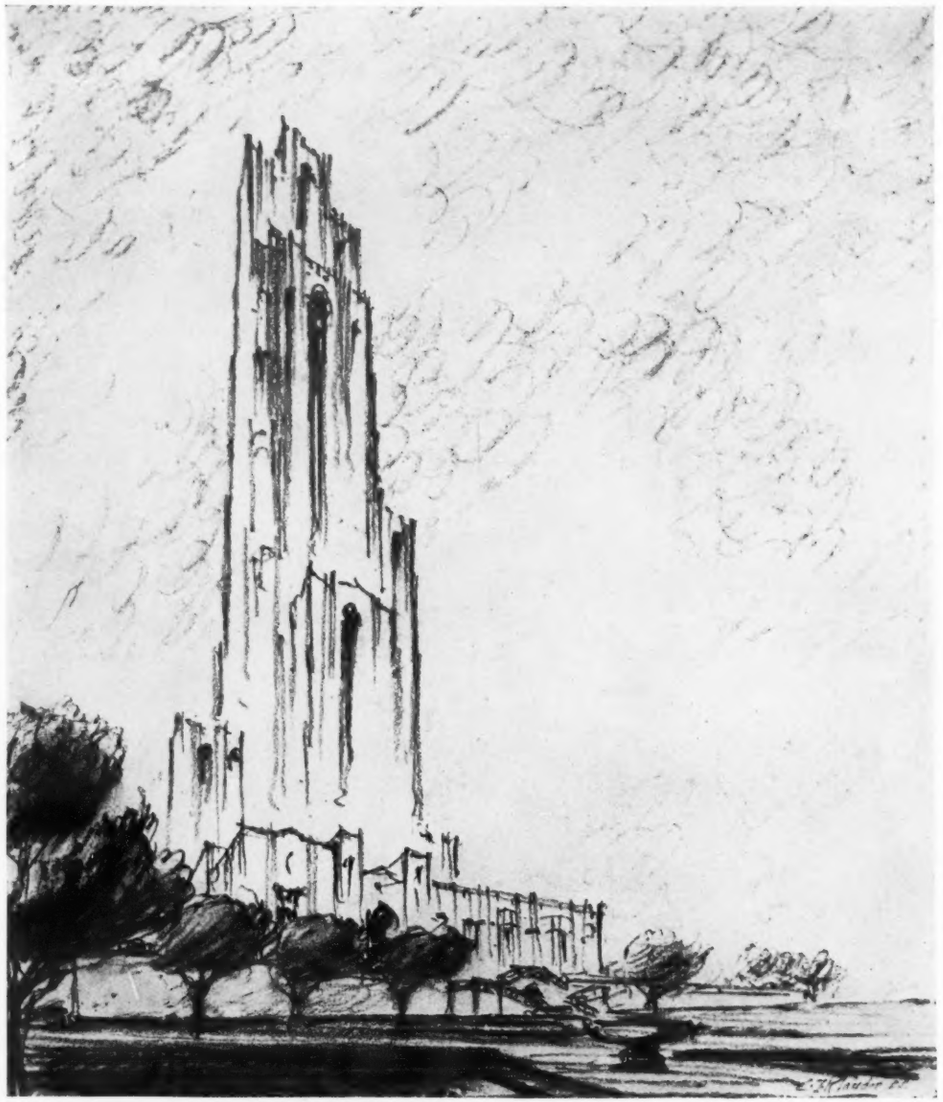


DRAWING IN RED CRAYON ON TRACING VELLUM BY CHARLES Z. KLAUDER

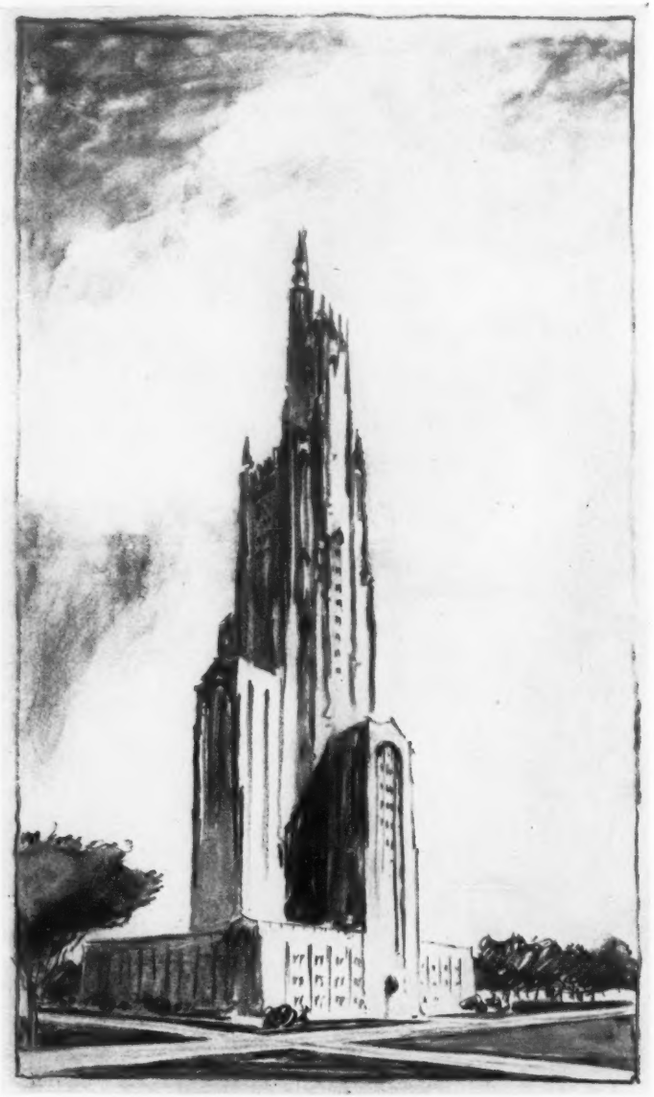
Tower, Concordia Seminary, St. Louis, Missouri.



DRAWING IN RED CRAYON ON TRACING VELLUM BY CHARLES Z. KLAUDER
Tower, Wellesley College, Wellesley, Massachusetts.



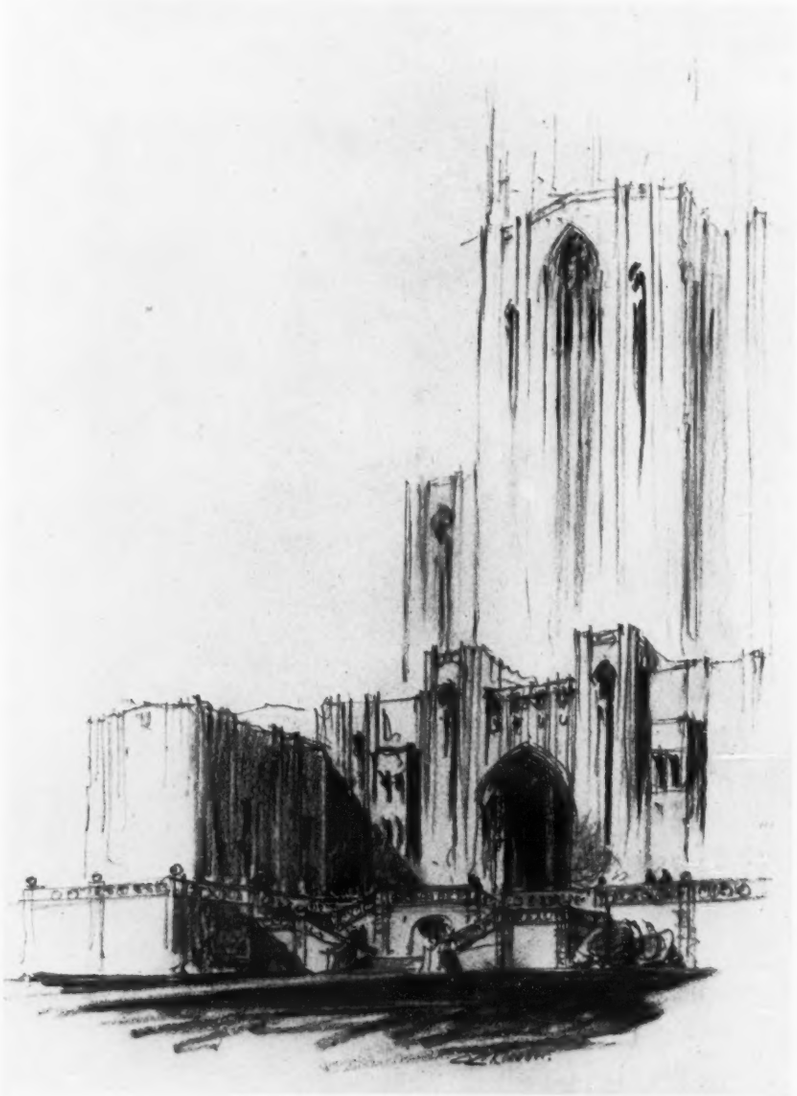
Red Crayon on Tracing Vellum



Charcoal on Thin Tracing Paper

PRELIMINARY STUDIES BY CHARLES Z. KLAUDER FOR CATHEDRAL OF LEARNING

UNIVERSITY OF PITTSBURGH, PITTSBURGH, PENNSYLVANIA.

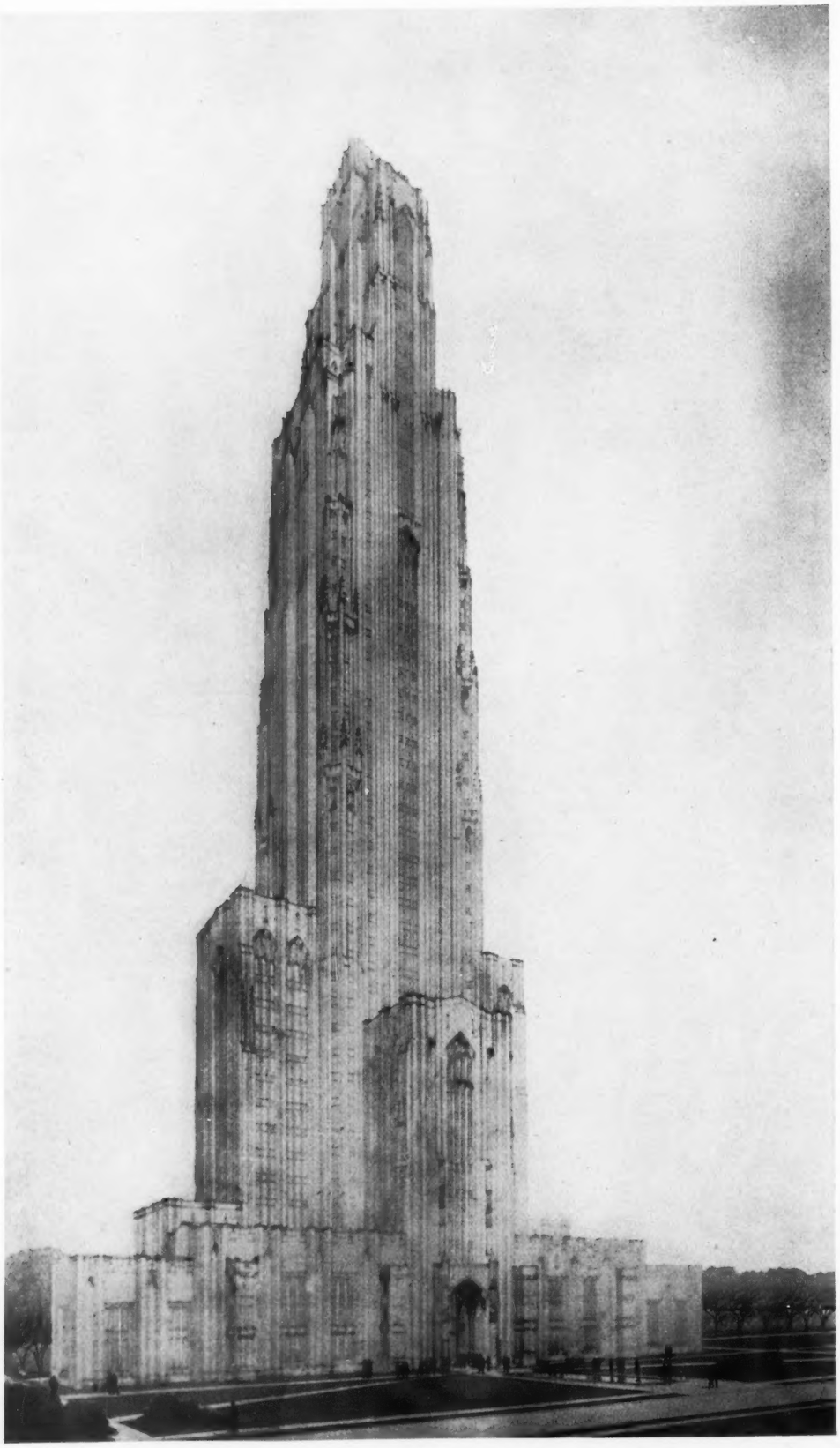


Red Crayon on Tracing Vellum.

Lithographic Crayon on Tracing Vellum.

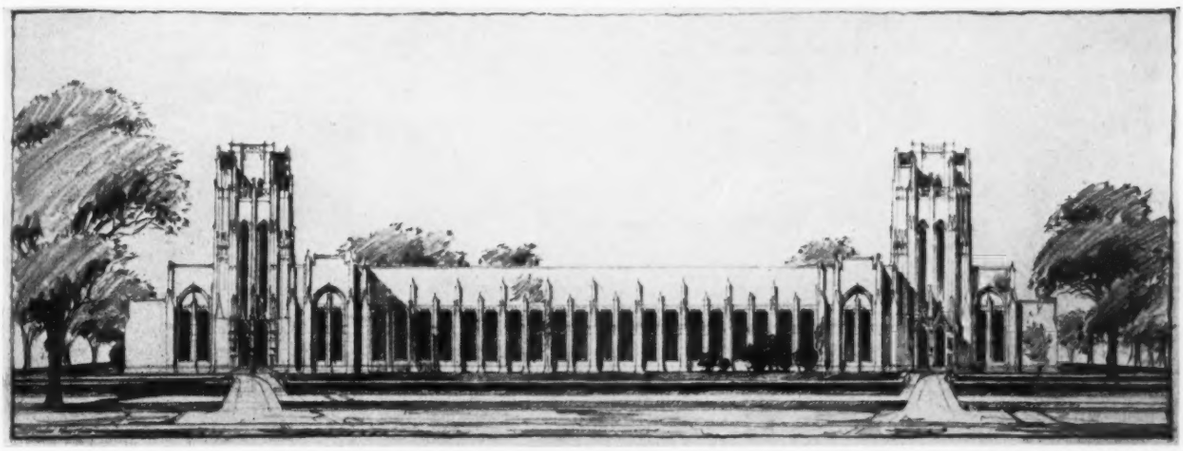
PRELIMINARY STUDIES BY CHARLES Z. KLAUDER FOR CATHEDRAL OF LEARNING

UNIVERSITY OF PITTSBURGH, PITTSBURGH, PENNSYLVANIA.



WATER COLOR RENDERING BY CHARLES Z. KLAUDER

Cathedral of Learning, University of Pittsburgh.



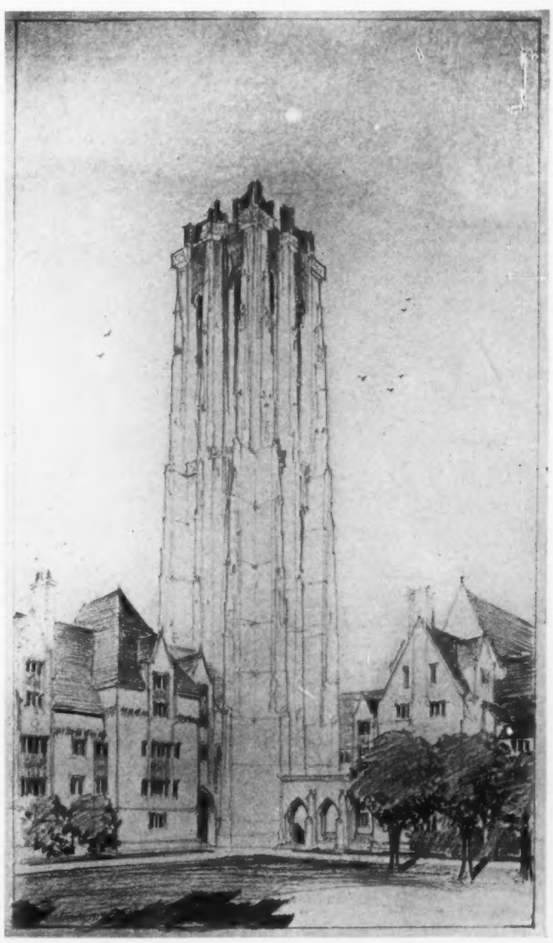
Red Crayon Drawing on Tracing Vellum by Charles Z. Klauder.
PEABODY MUSEUM, YALE UNIVERSITY, NEW HAVEN, CONNECTICUT.

(Continued from page 43)

fully laid out perspective projected from the plan and elevations of the proposed tower.

Drawings of this kind serve as a very important means of study. In such a perspective the plan and elevations are coordinated. If when the plan and elevations are translated into the perspective the effect of the latter is not satisfactory in design the changes needed to make it satisfactory are sketched in and projected back to the plan and elevations which are changed to correspond. By this means it is possible to design in such a way that when built the structure will present the desired appearance when seen in perspective. For instance, if the perspective drawing shows a tower that is not smooth in profile, if the relation of the diagonal width at the top to the diagonal width at the bottom is not satisfactory the perspective is modified and the change is quite positively transferred back to the measuring line of the instrumental perspective that underlies the sketch and consequently to the elevations and the plans.

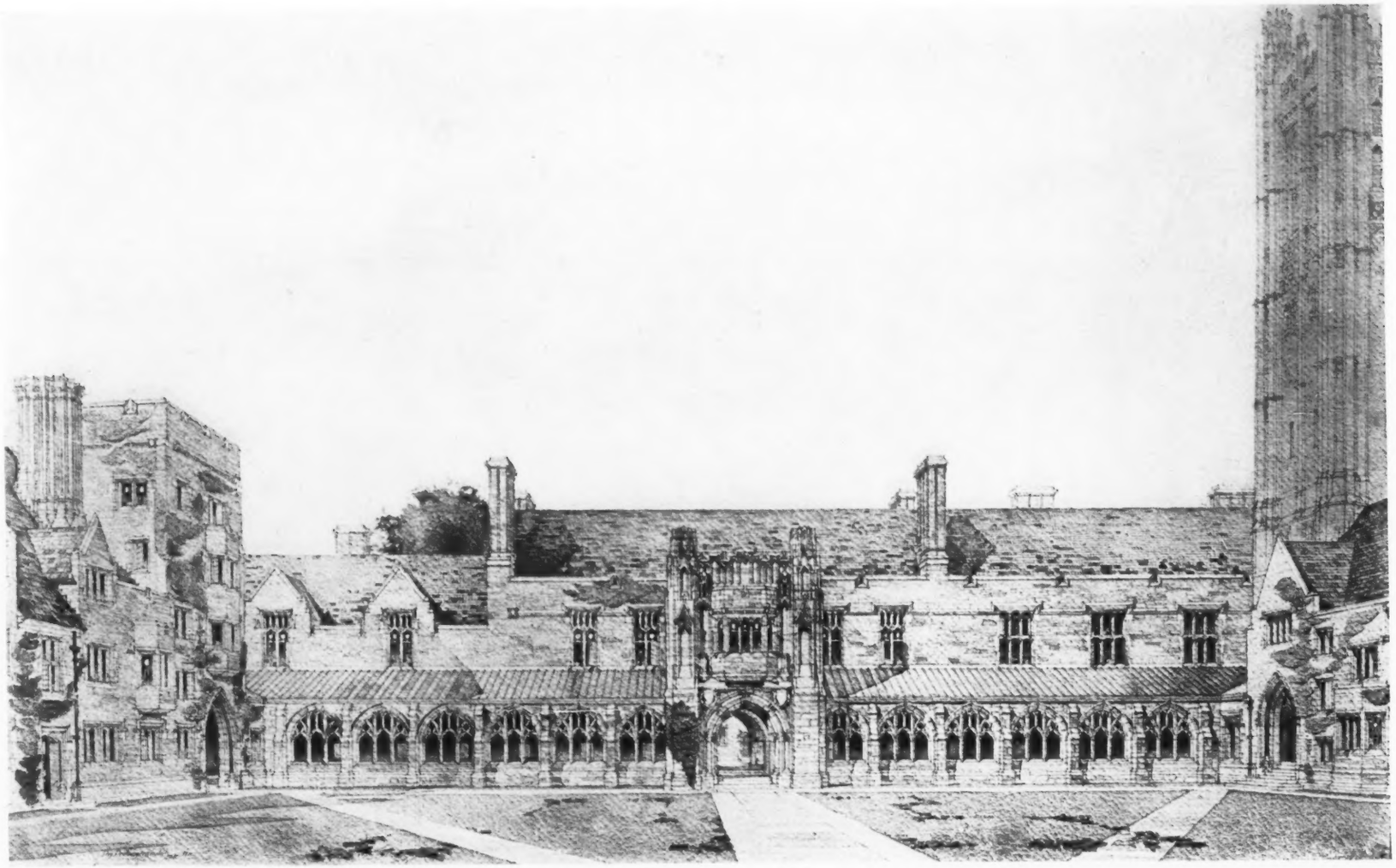
When the design has been studied in this way a fresh piece of tracing vellum is laid over the corrected instrumental perspective and the picture drawn in boldly over the lines of the lay-out. In working over one of these tight perspectives it is essential for the draftsman to "loosen up," not an easy thing to accomplish, with an instrumental drawing for a starting point. Relax one must, however. It is in the success with which Klauder relaxes and translates these instrumental perspectives into pictures with bold, sure and wonderfully expressive lines that he shows his greatest mastery in draftsmanship. Sometimes what was started as an unimportant study becomes so interesting and good that it is carried to completion as a picture. Among the drawings in Klauder's office is one that developed in this way after it was started on a piece of tracing vellum that was not large enough to go all the way to the bottom of the picture. A piece of the paper was pasted on and the drawing carried down. It is one of the best.



Red Crayon Drawing by Charles Z. Klauder.
STUDY FOR TOWER, YALE UNIVERSITY.

Among the points studied in such drawings as that of the tower of Concordia Seminary, shown on page 44, are the refinements that are among the most admirable features of Klauder's designs. For instance this drawing shows the "sink-

(Continued on page 57)



WATER COLOR RENDERING BY CHARLES Z. KLAUDER

Cloister—Dining Halls, Princeton University.

WATER COLOR RENDERING BY CHARLES Z. KLAUDER

Dormitory, Cornell University, Ithaca, N. Y.

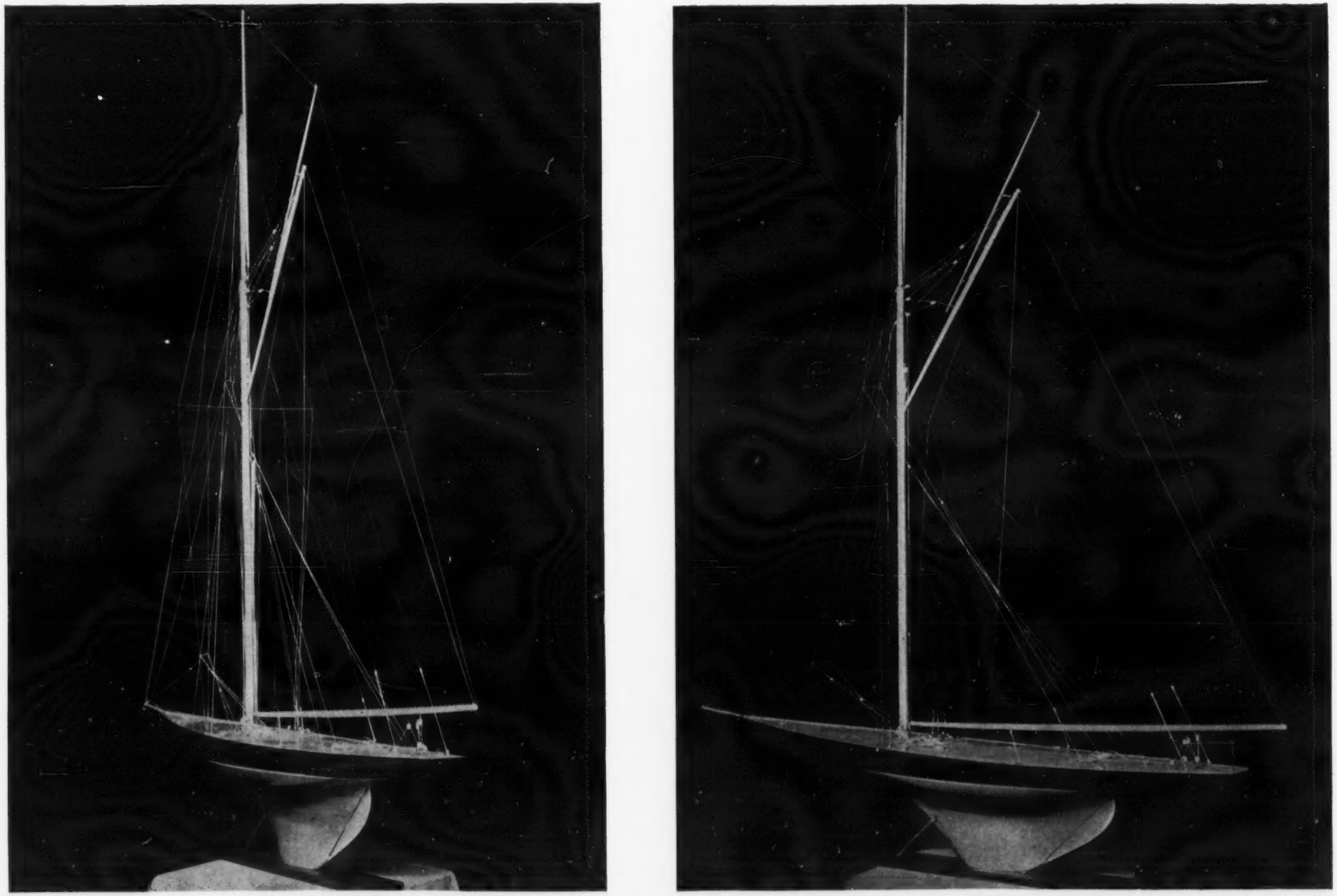
WATER COLOR RENDERING BY CHARLES Z. KLAUDER
Stock Pavilion, Pennsylvania State College.

RED CRAYON DRAWING ON TRACING VELLUM BY CHARLES Z. KLAUDER
Dormitory, Princeton University.

LITHOGRAPHIC CRAYON DRAWING ON LITHOGRAPHIC PAPER BY CHARLES Z. KLAUDER
Sketch, Segovia, Spain.

Lithographic Crayon on Lithographic Paper.
FANTASY BY CHARLES Z. KLAUDER

Red Crayon on Lithographic Paper.
SKETCH, CARCASSONNE, FRANCE, BY CHARLES Z. KLAUDER



YACHT MODEL DESIGNED AND BUILT BY CHARLES Z. KLAUDER

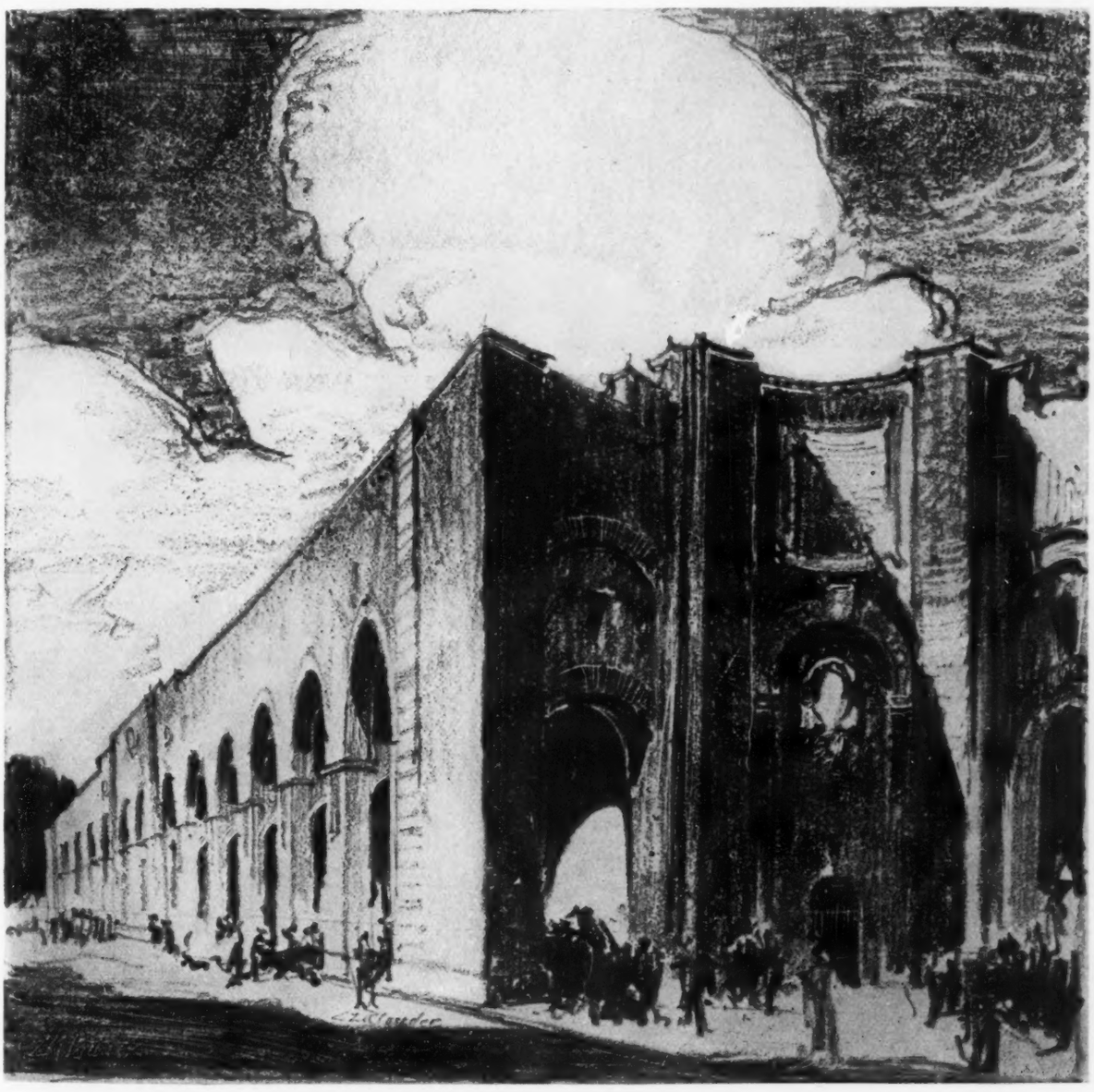
LITHOGRAPHIC CRAYON DRAWING ON LITHOGRAPHIC PAPER BY CHARLES Z. KLAUDER
Sketch, Granada, Spain.

(Continued from page 49)

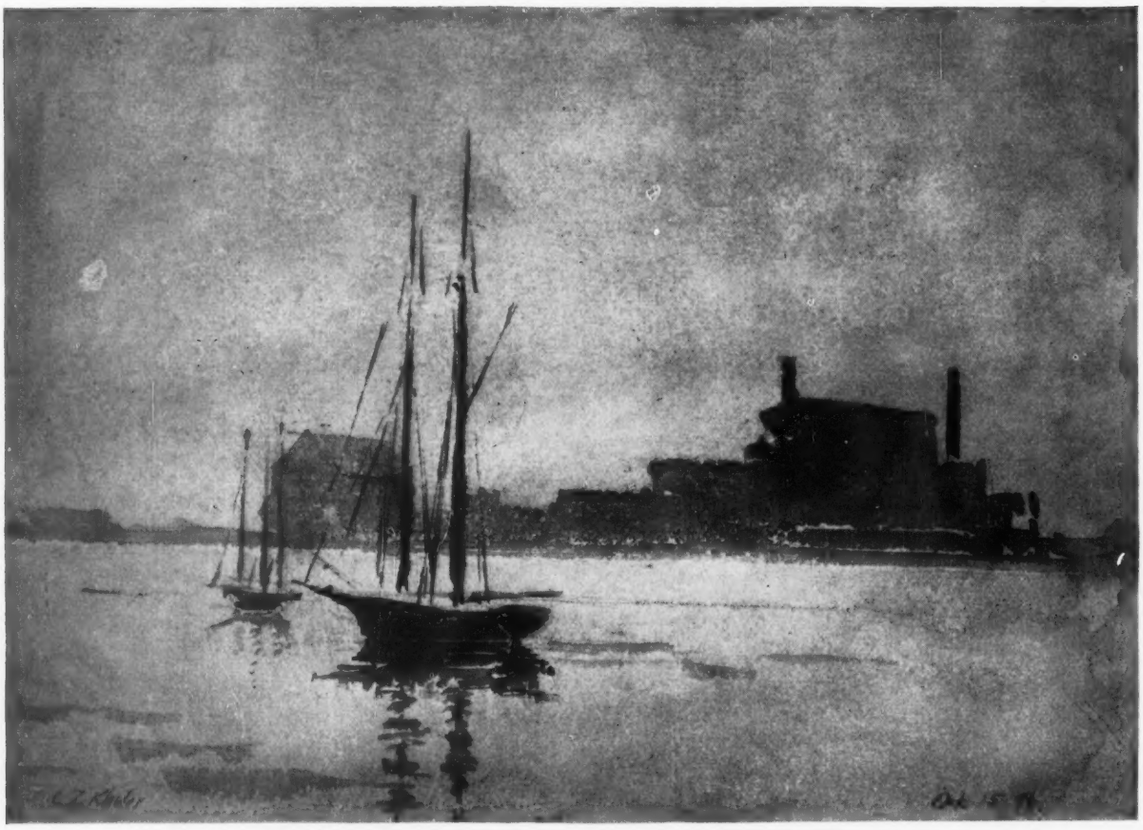
ages," the re-entering angles in the corners of the tower at the top. They take away the unpleasant sharpness of the corners of a square-topped tower. They soften the effect. This drawing also shows how the corner piers will look, it gives an opportunity to study the triangular pinnacles introduced in the corners. The triangular form of these pinnacles is a happy thought, by the way, for a triangular pinnacle has much more variety and freedom of appearance than one having an even number of sides, because when seen from even slightly different points of view it is different in silhouette. All these things are studied in these perspective drawings and carried back to the plans and elevations, to be in turn created in the stone realization of the architect's conception. In addition to these drawings on tracing vellum, most of which are in red crayon, there are in Mr. Klauder's office in Philadelphia renderings and sketches in various mediums, that show his wide range of treatment.

Preliminary crayon studies and a water color rendering of the design for the Cathedral of Learning at the University of Pittsburgh made by Mr. Klauder are reproduced on pages 46, 47 and 48 of this issue. Other selections of Mr. Klauder's work, which also demonstrate his mastery of draftsmanship and skill as a designer, include freely drawn sketches to demonstrate to his clients the finished appearance of their proposed buildings, water color renderings of various buildings and some lithographic crayon

(Continued on Page 60)

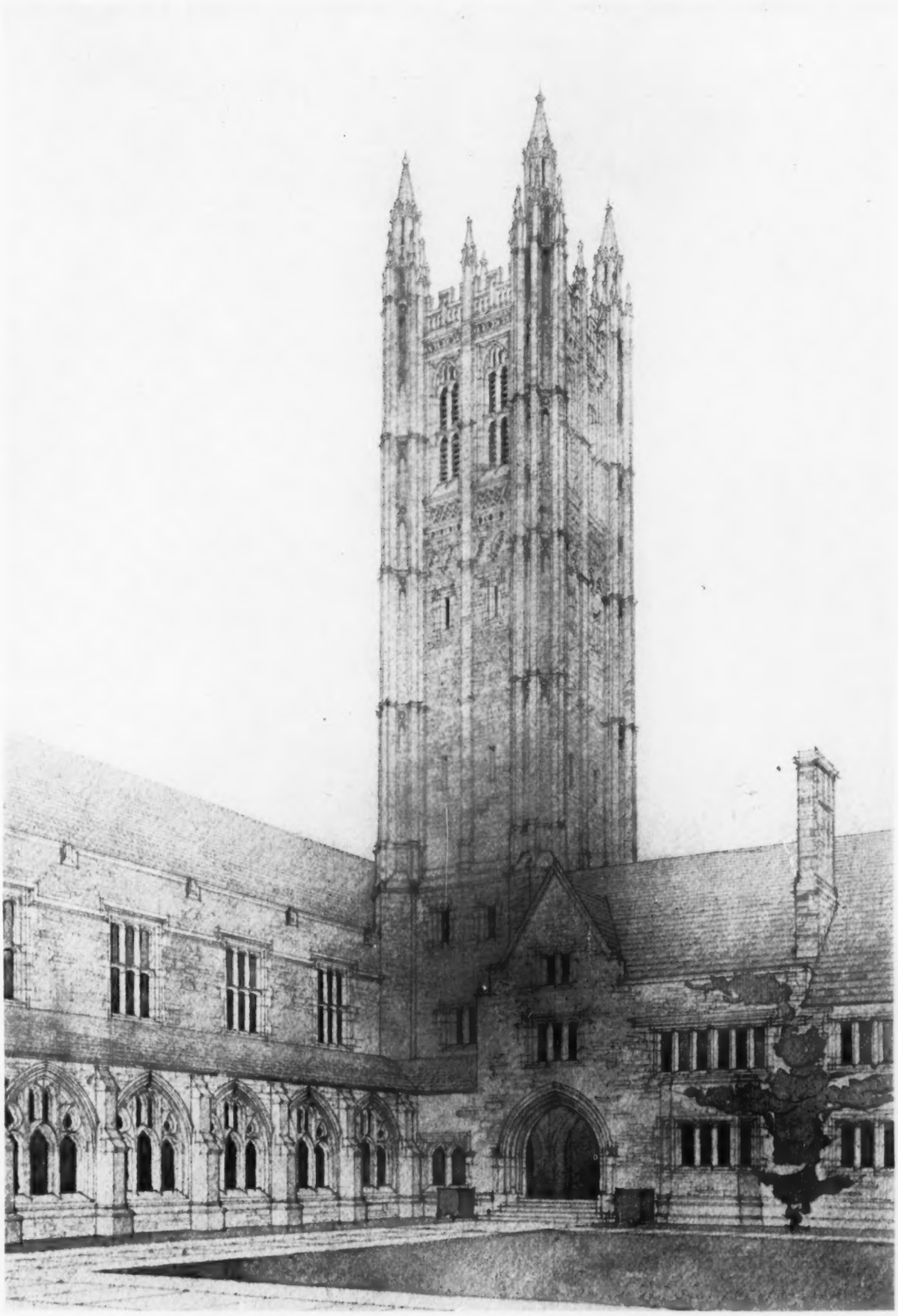


LITHOGRAPHIC CRAYON SKETCH BY CHARLES Z. KLAUDER
Stadium, University of Pennsylvania.



WATER COLOR SKETCH BY CHARLES Z. KLAUDER

WATER COLOR SKETCH, BERMUDA, BY CHARLES Z. KLAUDER



WATER COLOR RENDERING BY CHARLES Z. KLAUDER
Holder Tower, Princeton University.

(Continued from page 57)

and water color sketches made while in Spain and France.

It is interesting to note that in the rendering of the "Stock Pavilion," for Pennsylvania State College shown on page 52, a type simplification is shown in the drawing corresponding to the design character of the building.

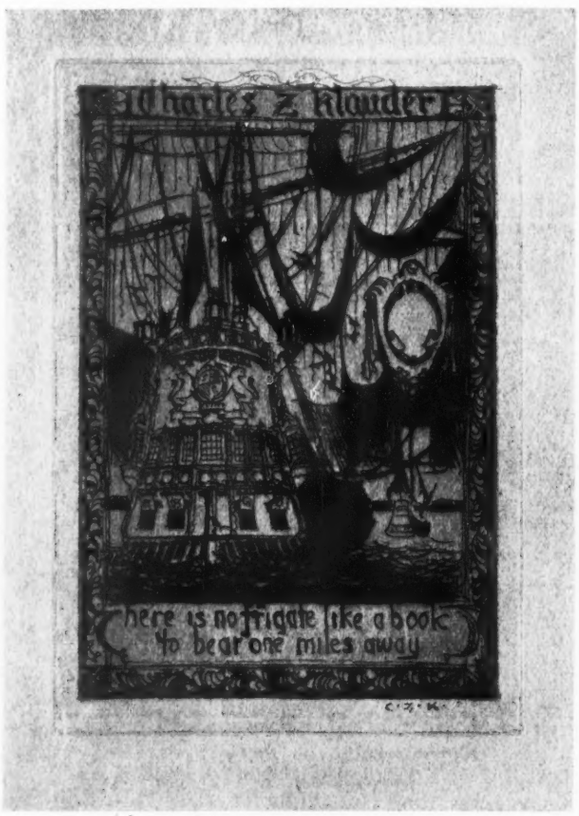
The sketches in lithographic crayon shown on pages 53 and 54 are masterly in the highest degree. On page 54, the lower illustration shows one of the most interesting drawings of all, a Fantasy.

On page 56 is a strong sketch made at Granada, with lithographic crayon on lithographic paper, while on the opposite page is a powerful sketch study of the Stadium of the University of Pennsylvania, done in the same medium.

The watercolor sketches reproduced on page 58 are notable for their tenderness combined with simplicity and strength.

One of Mr. Klauder's diversions is the designing and building of model yachts, one of which is illustrated on page 55. These models are beautifully and splendidly made, designed with scientific thoroughness and sail with remarkable speed. He may be seen in Central Park, New York, on Sunday mornings when the young and grown-ups gather to match their small craft on the park lake.

Keen intellectually, artistically sensitive, decisive and tolerant in character and simple in manner, Mr. Klauder's personality commands admiration as well as does his skill as a master draftsman.



Full Size Reproduction of
BOOK-PLATE ETCHING
BY CHARLES Z. KLAUDER

IOANNIS Y. AÑEZ

PARLADORII

IVRISPERITI.

IN REGIO VALLISOLETANO

PRÆTORIO ADVOCATI,

RERVM QVOTIDIANARVM.

LIBRI DVO.

ET QVOTIDIANARVM DIFFERENTIARVM

Sesquicenturia, cui accesserunt eiusdem Authoris quæstiones duodeuiginti vtiles, & necessariæ in foro versantibus.

Cum Argumentis, Summarijs, Numeris, & Indice Capitum materiarum, & rerum memorabilium locupletissimo.

VALLISOLETI,

ET PANORMI, Apud Ioannem Baptistam Maringum. M. DC. XXVIII.

Superiorum Permissu.

TITLE PAGE OF AN ITALIAN BOOK, PRINTED IN 1628

(Reduced to 5/6 of Original Size)

PLATE XLI

An early Seventeenth Century Italian title page with a copper plate embellishment, exhibiting a fine piece of typography. It is arranged in six sizes of roman capitals, combined with some striking lower case roman and also italic letters. The second, fourth, seventh, twelfth, thirteenth, fourteenth and sixteenth lines are printed in red. Typography is closely allied to the fine arts, and types have always reflected the taste or feeling of their time.

PENCIL DRAWING BY ERNEST D. ROTH

RIO TERRI, FRARI, VENICE.

PLATE XLII

On the other side of this sheet is reproduced one of the charming pencil sketches made by Ernest D. Roth in Venice. It shows the same freedom and ease of pencil work as the sketch reproduced in the plate section of the October issue and presents an equally interesting bit of Venice.

DRAWING BY WALTER B. CHAMBERS

MT. ST. MICHEL.

PLATE XLIII

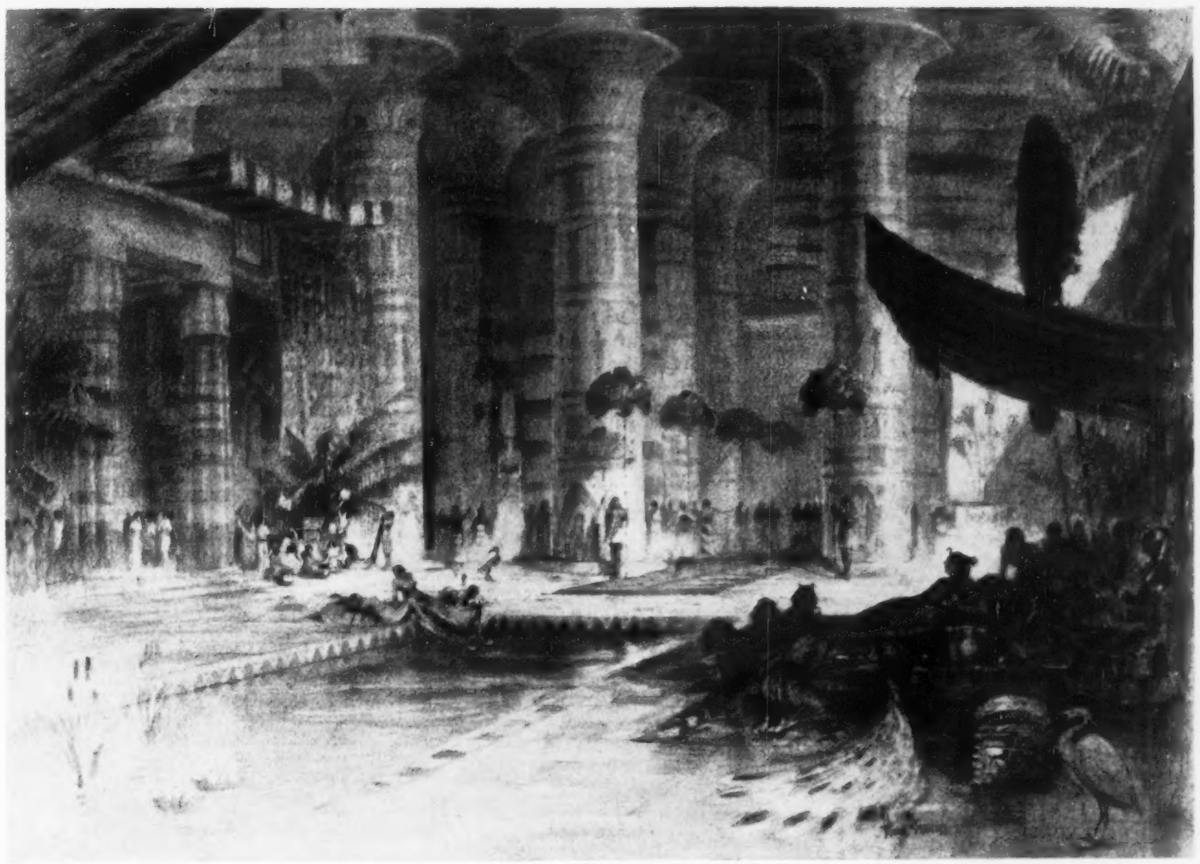
The effect of distance in the view through the arches and up the steps is especially well produced in the sketch by Walter B. Chambers which is printed on the other side of this sheet. The drawing is direct and clean, made on metallic paper which requires sureness of touch. It is one of the many sketches made by Mr. Chambers in 1889, on one of his study trips abroad.

Courtesy of H. C. Dickins

ETCHING BY LOUIS C. ROSENBERG
FEZ GATE, TANGERS.

PLATE XLIV

The etchings of scenes in Tangers made by Louis C. Rosenberg are remarkable not only for the success with which the expression of mass, line and texture in the architecture have been rendered but for the spirited and convincing representation of the life of the streets. In the spotting of light and dark these etchings are also effective.



The "House for Pharaoh's Daughter." *Rendering by Hugh Ferriss.*

DR. JOHN WESLEY KELCHNER'S

RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL

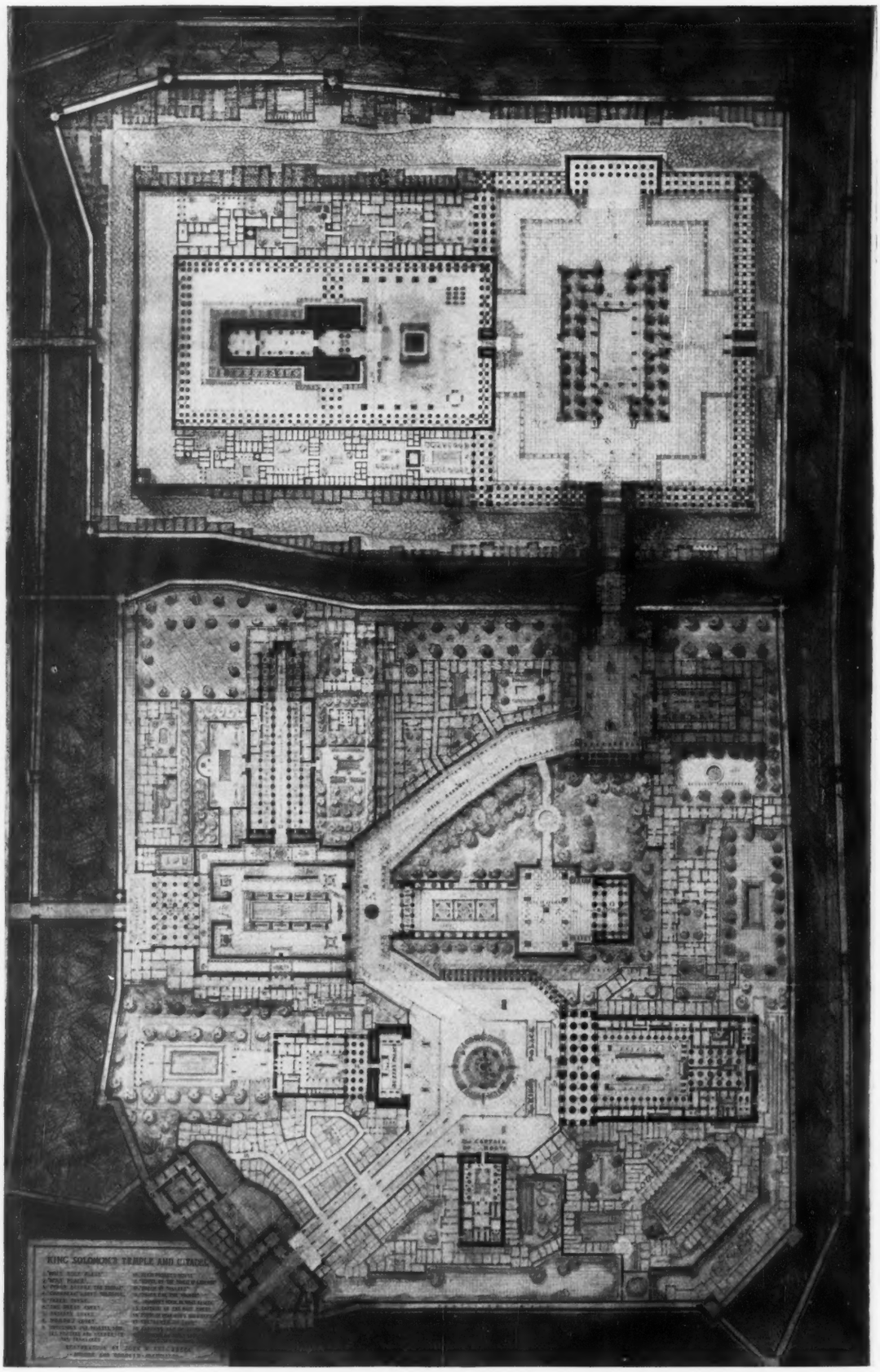
HELMLE AND CORBETT, Architects

A RESTORATION of King Solomon's Temple that bears evidence of authority has at last been made. Helmle and Corbett, Architects, have carried out the idea of John Wesley Kelchner, who, inspired by religious zeal has made the reconstruction of the Temple his chief object in life for over thirty years. Though drawings showing innumerable restorations are to be found in the architectural libraries, varying in character from an attempt at the Assyrian manner to a Gothic type, it is safe to say that never before has a restoration of this Temple been undertaken by competent and scholarly architects.

As a result of the research work and designing carried on by Helmle and Corbett during the past four years this restoration is now complete and it is splendidly shown in a large group of interesting drawings made by Birch Burdette Long, Hugh Ferriss, Taber Sears and others. Soon this restoration will be actually built as a part of the Sesquicentennial International Exposition to be held in Philadelphia in commemoration of the one hundred and fiftieth anniversary of the signing of the Declaration of Independence. The opening date of the Exposition is June 1, 1926.

Visitors will be able to walk about the courts and to experience the sensation of having been carried back to King Solomon's time, for it is understood that life is to be given to this picture by pageantry illustrating the customs, dress and activities of that time. The Temple will be completely fitted and will have replicas of the great branched candlesticks, shewbread, the heavily jewelled priestly breast plates and of the vestments and other accessories. In the Most Holy Place, back of a mystic veil of blue, scarlet and purple, will rest a reproduction of the Ark of the Covenant, guarded by gigantic golden cherubim.

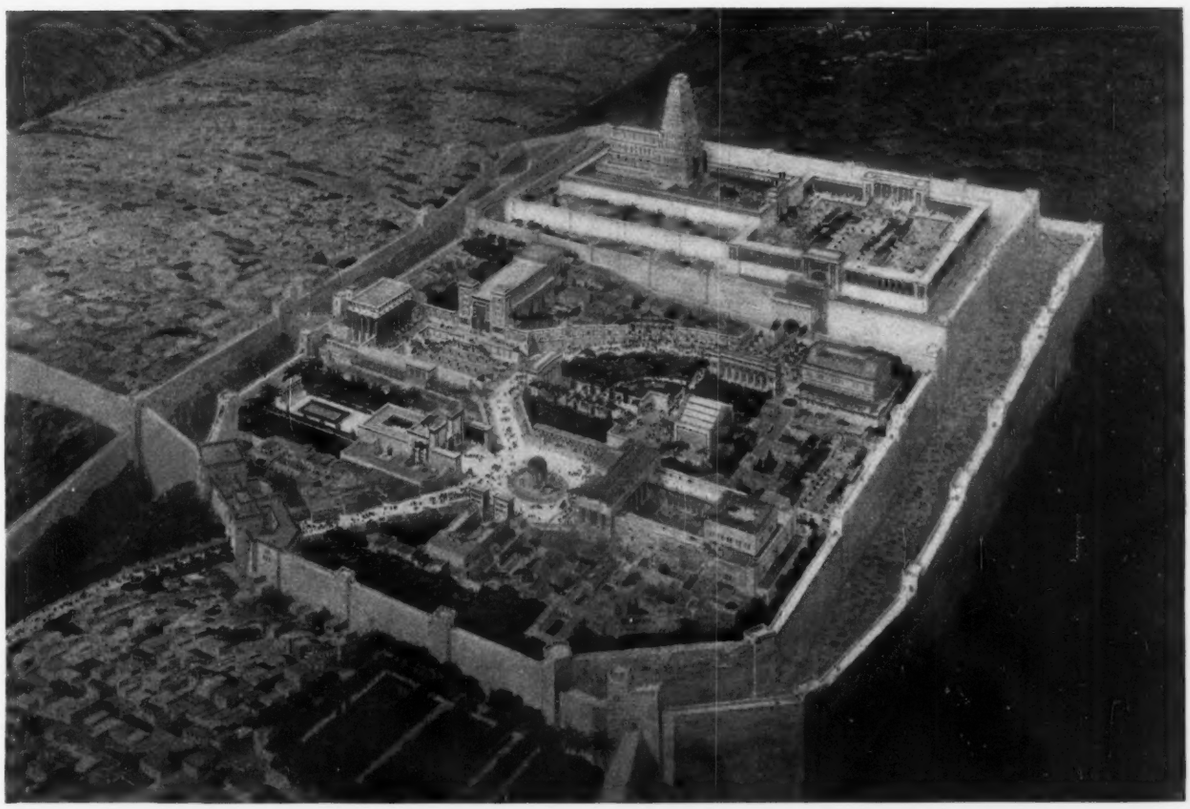
It is intended to incorporate in the structure a system of pipes through which, when the building is empty of visitors, it will be possible to force volumes



GROUND AND FIRST FLOOR PLAN OF KING SOLOMON'S TEMPLE AND CITADEL

RESTORATION BY DR. JOHN WESLEY KELCHNER *HELMLE AND CORBETT, ARCHITECTS.*

RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.



"BIRDS-EYE VIEW"—RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.

RENDERING BY BIRCH BURDETTE LONG. *HELMLE AND CORBETT, ARCHITECTS*

of gas which will envelope the structure to its full height presenting, in conjunction with other means, an impressive spectacle of the destruction of the Temple. When the clouds of gas drift away the structure will be found unharmed.

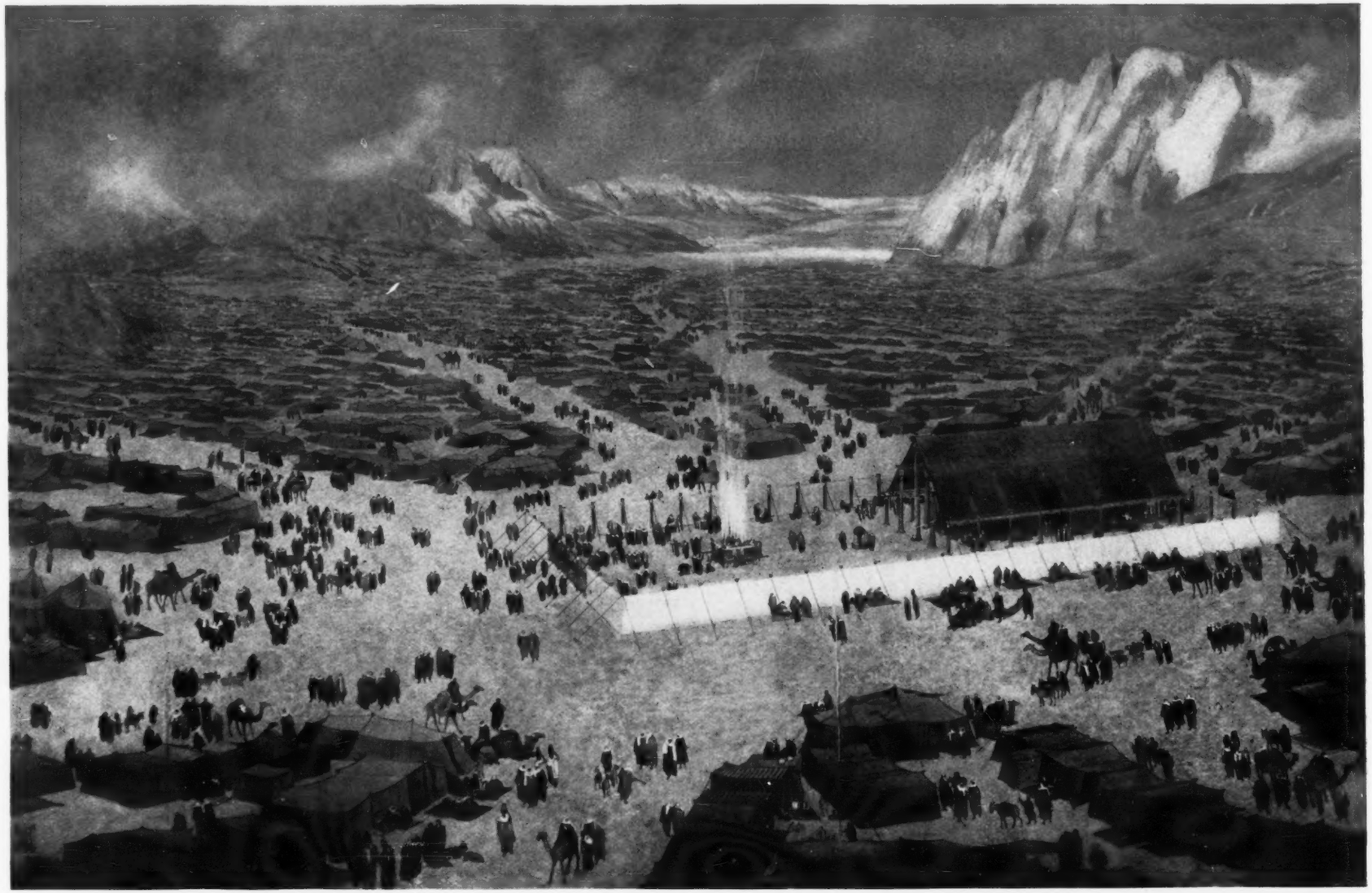
Broader than the architectural significance of this restoration will be its significance to the public, for it will mean the reconstruction of the great Temple which Solomon erected on the heights of Mount Moriah that the monotheistic principle of one God might be presented with as much majesty as possible to the multitudes of idolatrous believers in polytheism who constantly poured along the great trade route between the north and south through the city of Jerusalem. As we know, Solomon's Temple was built during the period of peace and prosperity which followed the turbulent days of war under King David and it is fitting that the reconstruction of the Temple at Philadelphia is to stand as a symbol of world peace to all who come to this International Exposition.

About five years ago Dr. Kelchner met Mr. Corbett and explained his idea for the reconstruction of King Solomon's Temple. Previous to that time he had spoken of it to many other architects who had not been able to visualize the possibilities. As a preparation for the realization of his dream Dr. Kelchner had taken up the study of Hebrew, Latin, Greek and modern languages in order that he might be able to study in the original what had been written regarding the Temple. He had also visited Palestine and studied the site of the Temple and its surroundings.

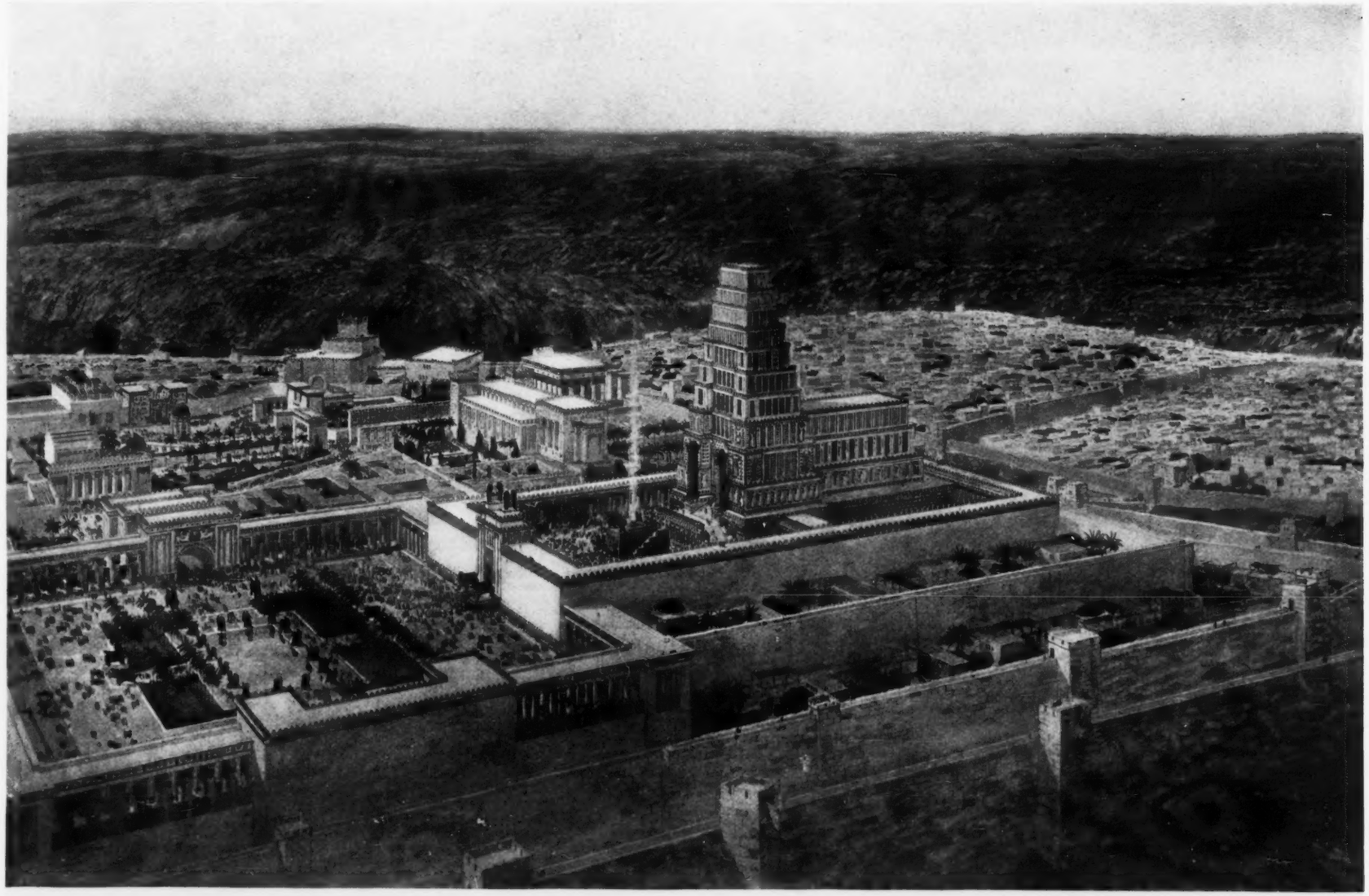
Upon undertaking the work Mr. Corbett immediately set about making himself and the members of his organization who were to take part in this work thoroughly familiar with the available data on the Temple. To this end he sought the aid of William Bell Dinsmore, Associate Professor of Architecture and Librarian of Avery Library, Columbia University. Mr. Dinsmore prepared a complete list of books bearing on this subject and the study of these books and of other sources of information was pursued carefully and patiently. This, of course, in addition to the information supplied by Dr. Kelchner. Above all the Biblical description of Solomon's Temple was taken as the authority by which all other information and conjectures were checked and to which they were regarded as only supplementary. The architects have taken the position that the description of the Temple in the Bible is absolutely correct and accurate in every way.

In studying this problem Mr. Corbett at the outset laid down clearly two basic principles: first, that in making this restoration the architects must proceed as the architect, or architects, of the Temple necessarily did, assuming the use of only such methods of construction and materials as were employed, or might have been employed, at that time and of such architectural forms as might have been employed. The only buildings to be studied for sug-

[*Continued on page 76*]

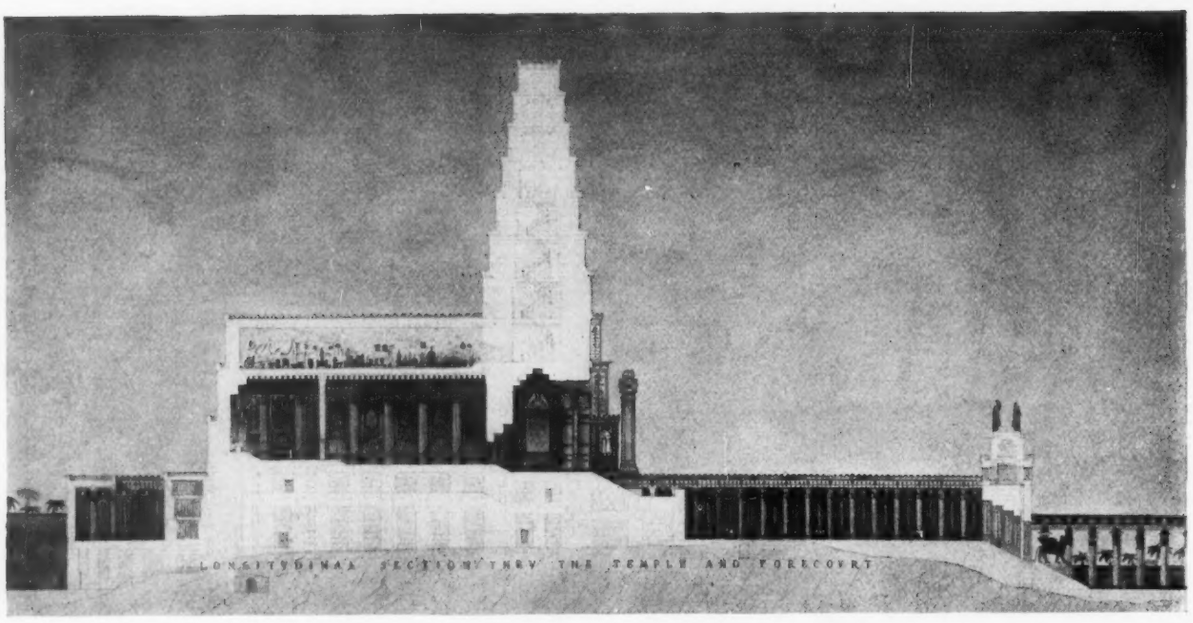


ISRAEL ENCAMPED ROUND-ABOUT THE TABERNACLE IN THE WILDERNESS OF SINAI.
Rendering by Birch Burdette Long.



KING SOLOMON'S TEMPLE AND CITADEL—VIEW FROM THE NORTH EAST CORNER.

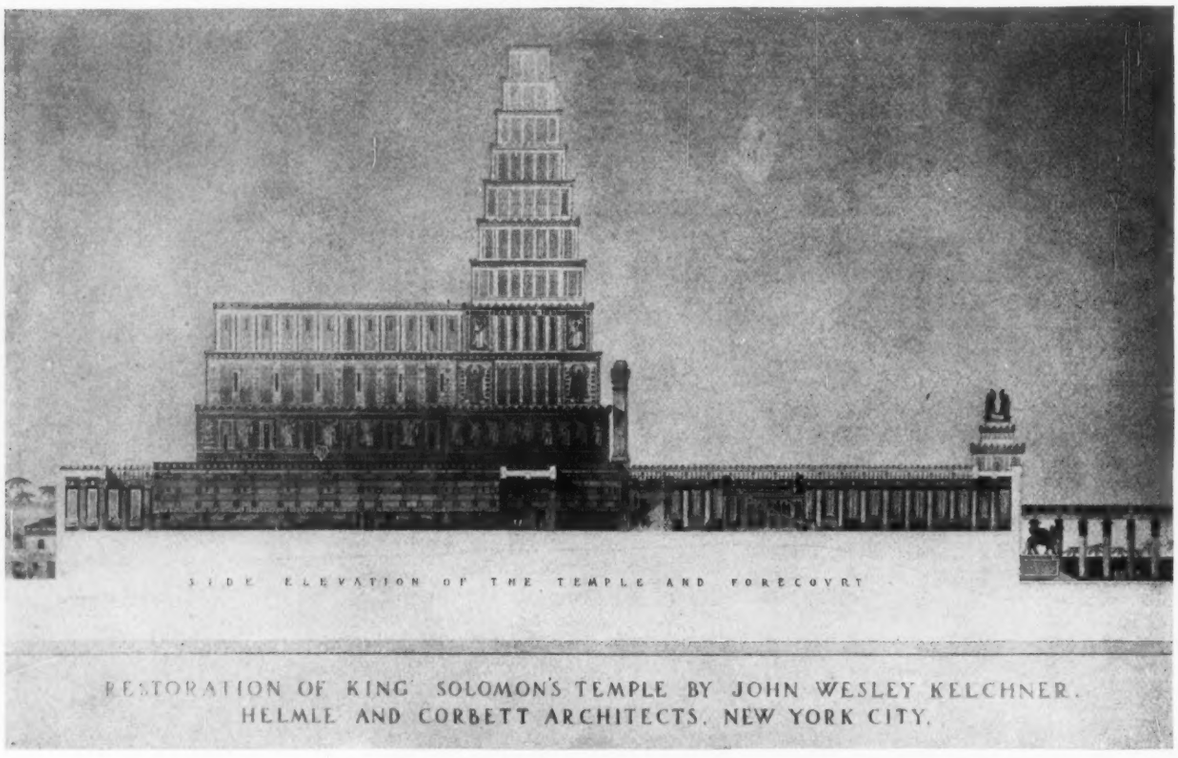
RESTORATION BY DR. JOHN W. KELCHNER *Rendering by Birch Burdette Long.* *HELMLE AND CORBETT, ARCHITECTS.*



Longitudinal Section Thru The Temple and Forecourt.

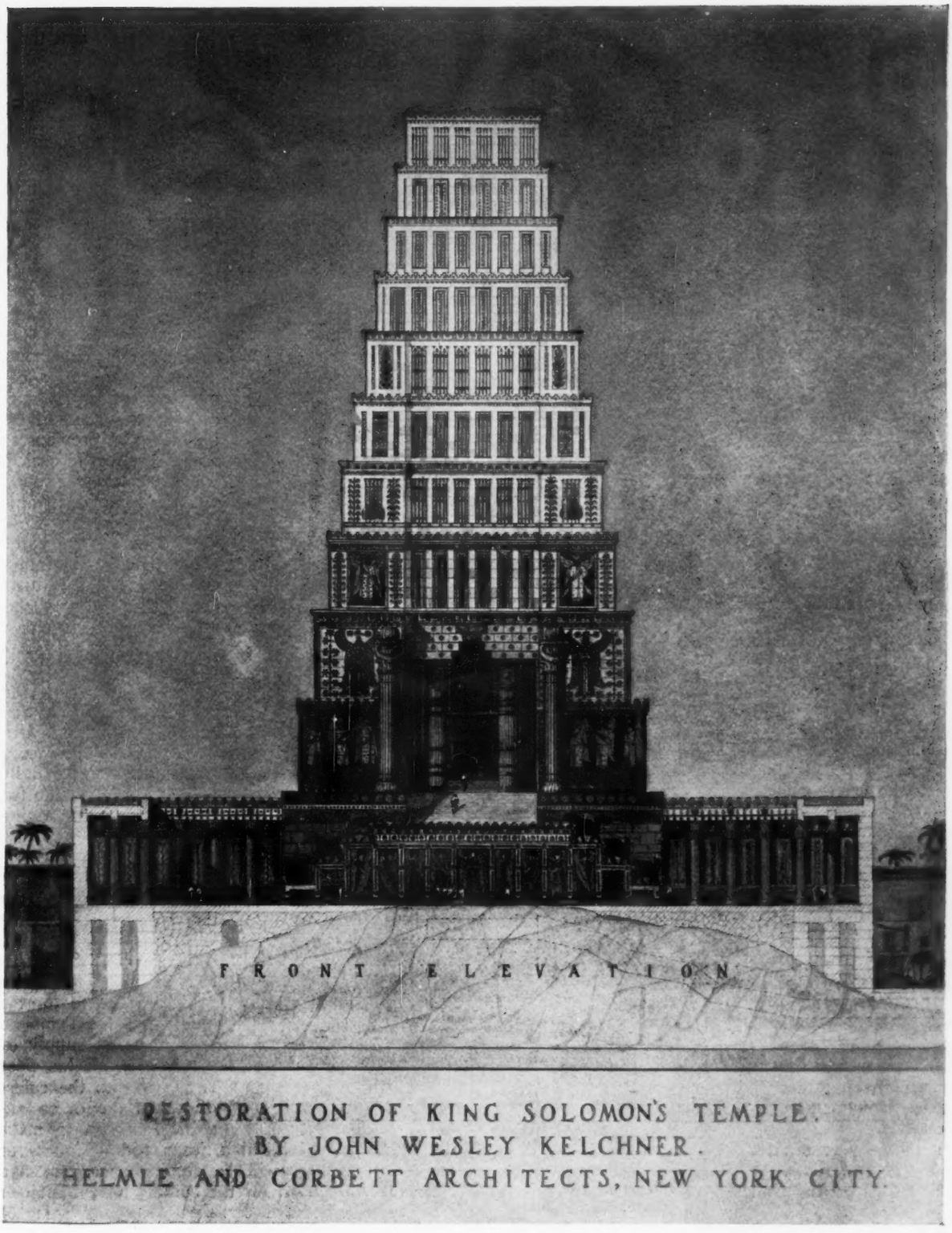
RESTORATION OF KING SOLOMON'S TEMPLE.

RESTORATION BY DR. JOHN WESLEY KELCHNER *HELMLE AND CORBETT, ARCHITECTS.*



RESTORATION OF KING SOLOMON'S TEMPLE BY JOHN WESLEY KELCHNER.
HELMLE AND CORBETT ARCHITECTS. NEW YORK CITY.

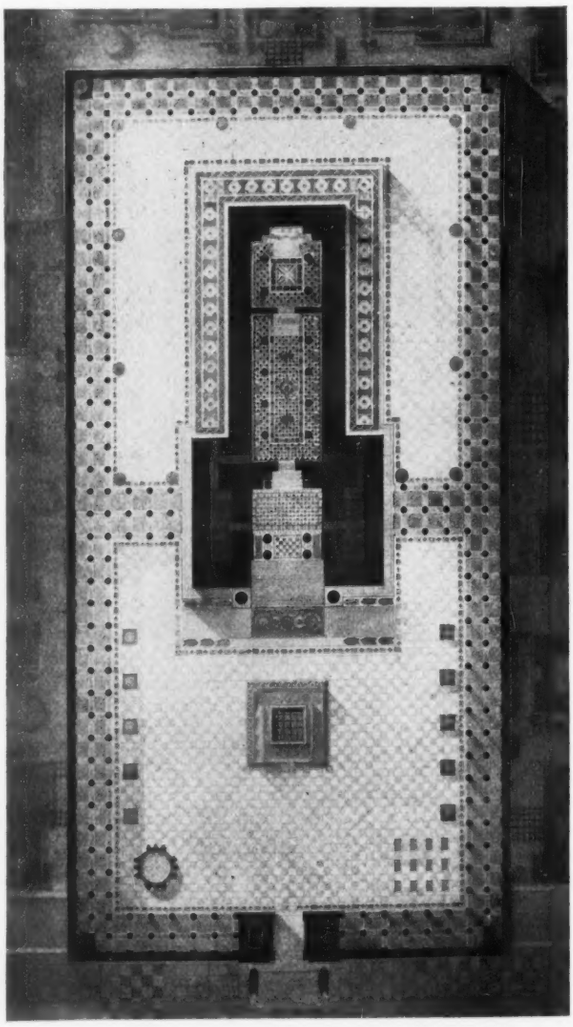
RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.



RESTORATION OF KING SOLOMON'S TEMPLE.
BY JOHN WESLEY KELCHNER.
HELMLE AND CORBETT ARCHITECTS, NEW YORK CITY.

[*Continued from page 71*]

gestions were, therefore, those built previous to the building of the Temple. The second principle was that the site must be assumed to be in the condition which existed at the time the Temple was built, not in its present condition. In this connection it is important to note that many, if not all others, who have designed restorations of the Temple have overlooked this point. Mr. Corbett could not believe that the present condition of the site was that at the time King Solomon's Temple was erected. The present flat ground pointed out as the site did not correspond with the description of the location of the Temple, with the natural impulse to place so important a building of this character on a piece of high land or with the general hilly contour of the terrain in general. Consequently he made investigations and discovered that in the course of centuries a valley had been filled in and that at the time the Temple was built the site now pointed out was high land rising abruptly from its surroundings, —the kind of situation one would naturally expect would be chosen for the building.



GROUND FLOOR PLAN

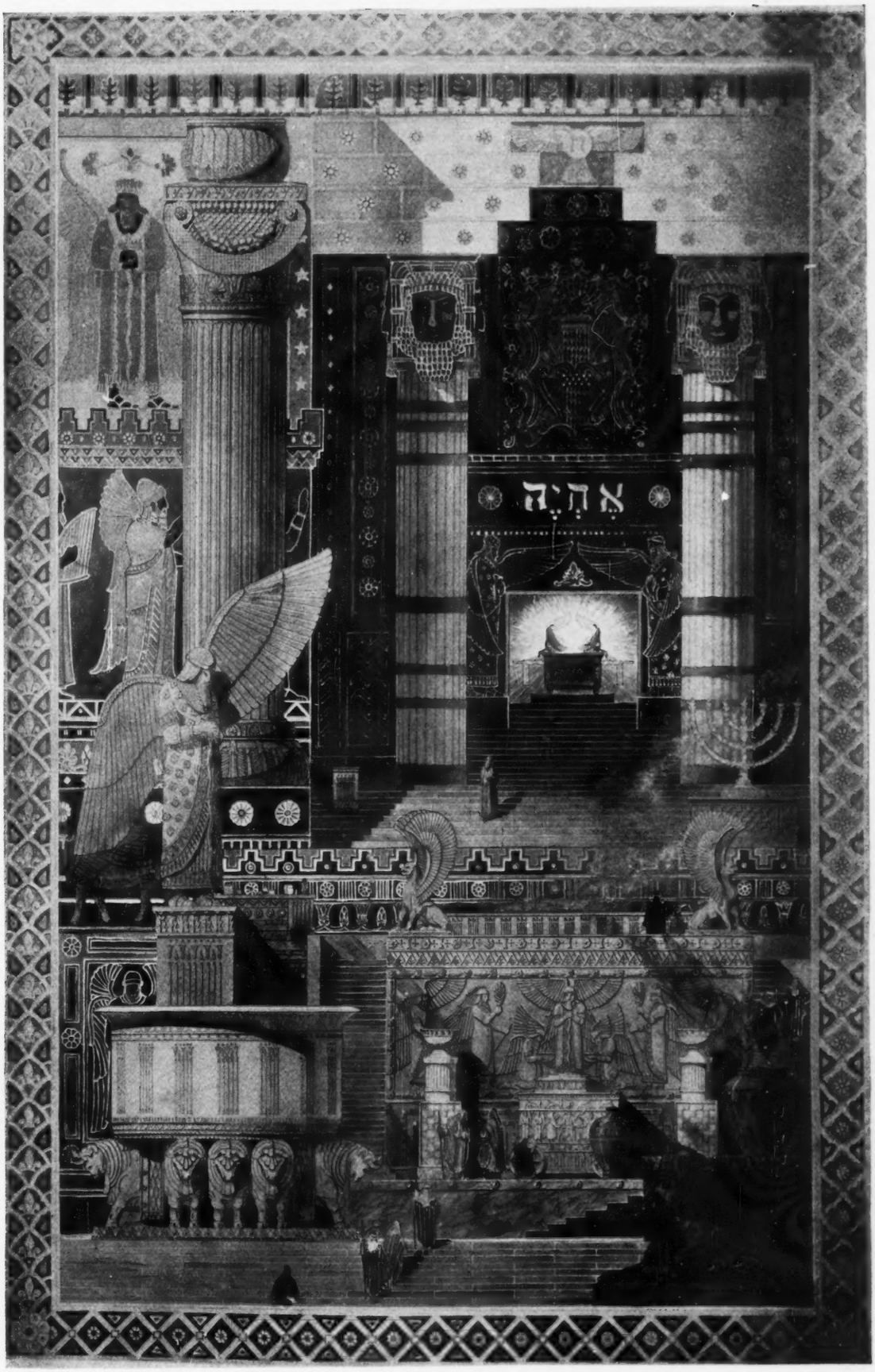
RESTORATION OF KING SOLOMON'S TEMPLE.

Helmle & Corbett, Architects

In proceeding with the work of designing, the first care was the study of the plans and their designing in conformity with the methods of construction employed at the time when the Temple was built. The materials affecting the thickness and the height of walls, the spacing of supports for beams and innumerable other matters which have a controlling influence upon the plan are necessarily reflected in the plans and in the design of the elevations. For instance, The Most Holy Place is described in the Bible as a room the dimensions of which, translated into our system of measure, are 80 ft. long, 40 ft. wide and 20 ft. high. With ceiling beams carried across the shorter dimension: there would be a span of 40 ft. which, for wooden beams, is, of course, impracticable. The solution of this difficulty was the use of a row of columns along each side within the room, reducing the greatest span to a proper length. This is a method of construction in conformity with the practice of the times and for which there is ample authority. The fact that these rows of columns are not mentioned in the Biblical description of the room may be accounted for on the ground that they were customary details of such construction, that their presence was taken for granted. It is safe to assume that if rows of columns had not been used in this way the fact would have been mentioned in the Biblical description, for the remarkable clear span of 40 ft. would have been one of the outstanding features which the author would surely not have failed to draw attention to.

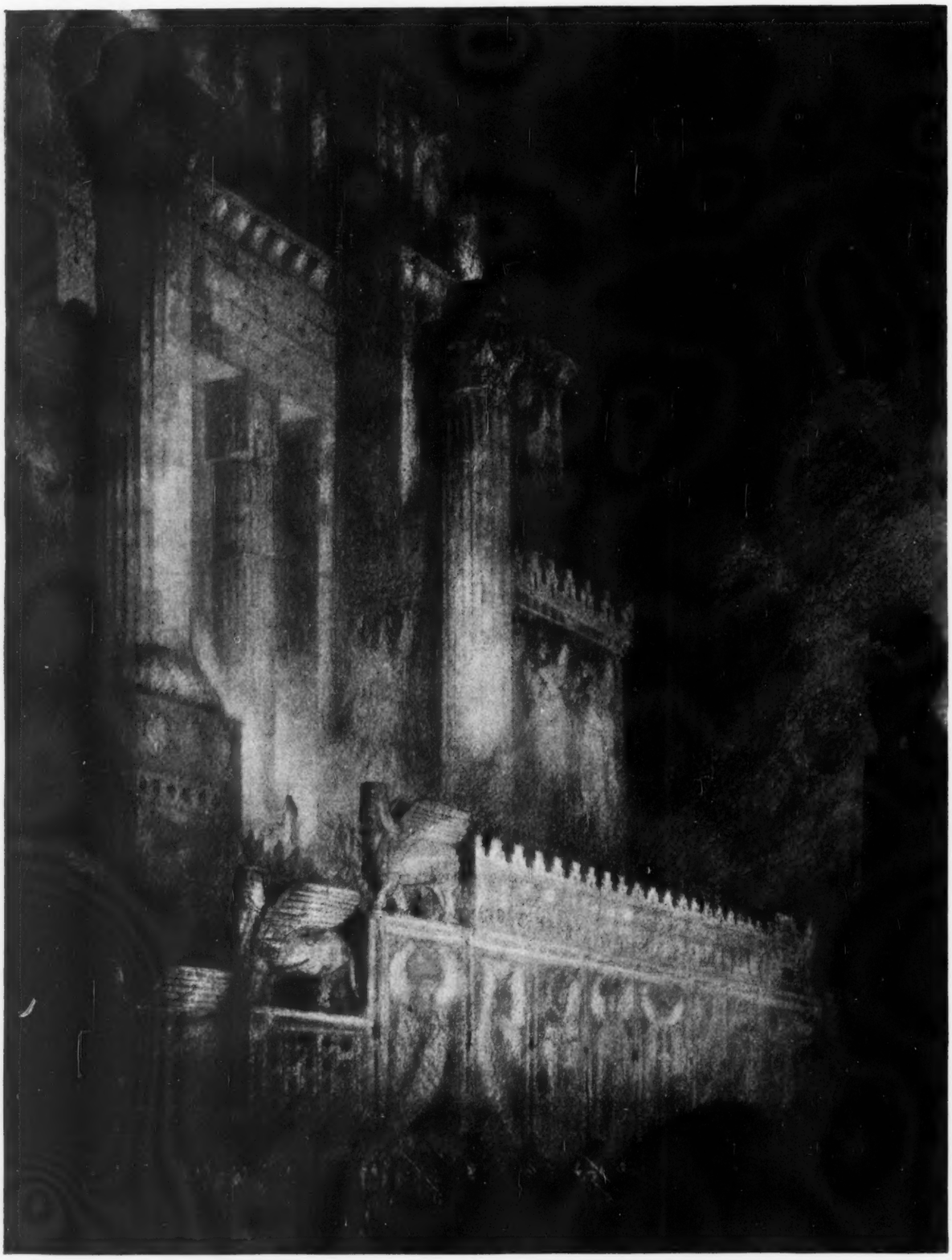
In the matter of design character Solomon's Temple showed a commingling of styles current at the time of its building and previous to that time, for Jerusalem was the gateway through which much of the traffic of the then-known world passed. Multitudes of traders must have traversed King Solomon's country and the inhabitants derived a large part of their income for services rendered to these traders, including portection of caravans against marauders. Unquestionably the treasury was largely enriched by the levying of tribute for the privilege of passing through the country. David had made the position of Jerusalem a powerful one among the nations and the tribute Solomon was able to command was rich. This importance of Jerusalem made available for the building of the Temple a widely varied supply of materials while his close relations with the rulers of other kingdoms enabled Solomon to make use of the most skilled artisans and designers of other nations. It will be recalled that Solomon obtained cedar wood for the building of the interior from King Hiram of Tyre who supplied cedar of Lebanon in exchange for material needed by the Phoenician King of Tyre. The Egyptian design influence was also particularly strong because of Solomon's alliance with the court of Egypt through his marriage with a princess of the Egyptians. It may be mentioned in passing that one of the most inter-

[*Continued on page 86*]



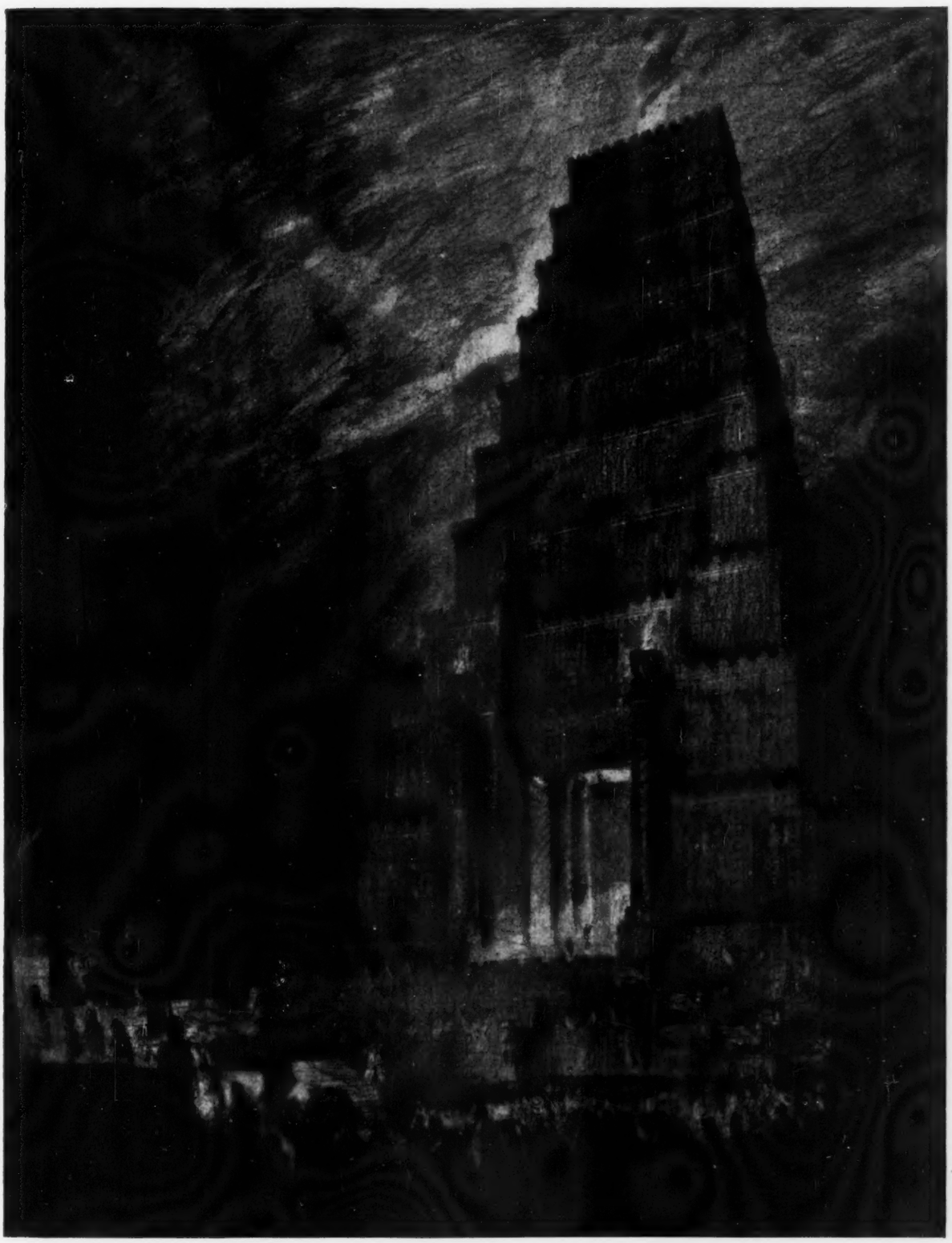
DETAILS OF THE RESTORATION OF KING SOLOMON'S TEMPLE.

RESTORATION BY DR. JOHN WESLEY KELCHNER *HELMLE AND CORBETT, ARCHITECTS.*



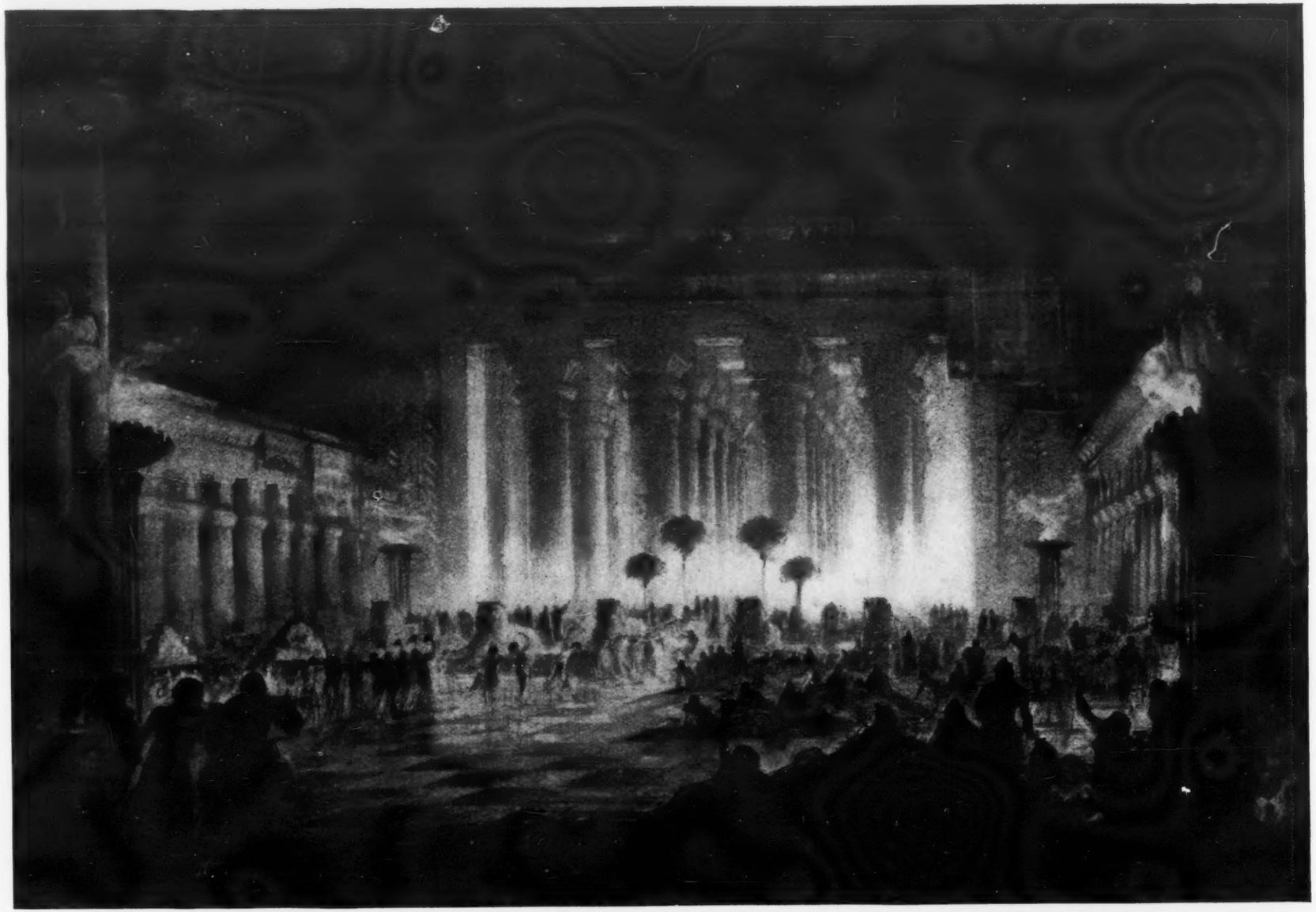
THE GREAT PORCH OF THE RESTORATION OF KING SOLOMON'S TEMPLE.

RENDERING BY HUGH FERRISS *HELMLE AND CORBETT, ARCHITECTS.*



THE RESTORATION OF KING SOLOMON'S TEMPLE—SCENE AT NIGHT.

RENDERING BY HUGH FERRISS *HELMLE AND CORBETT, ARCHITECTS.*

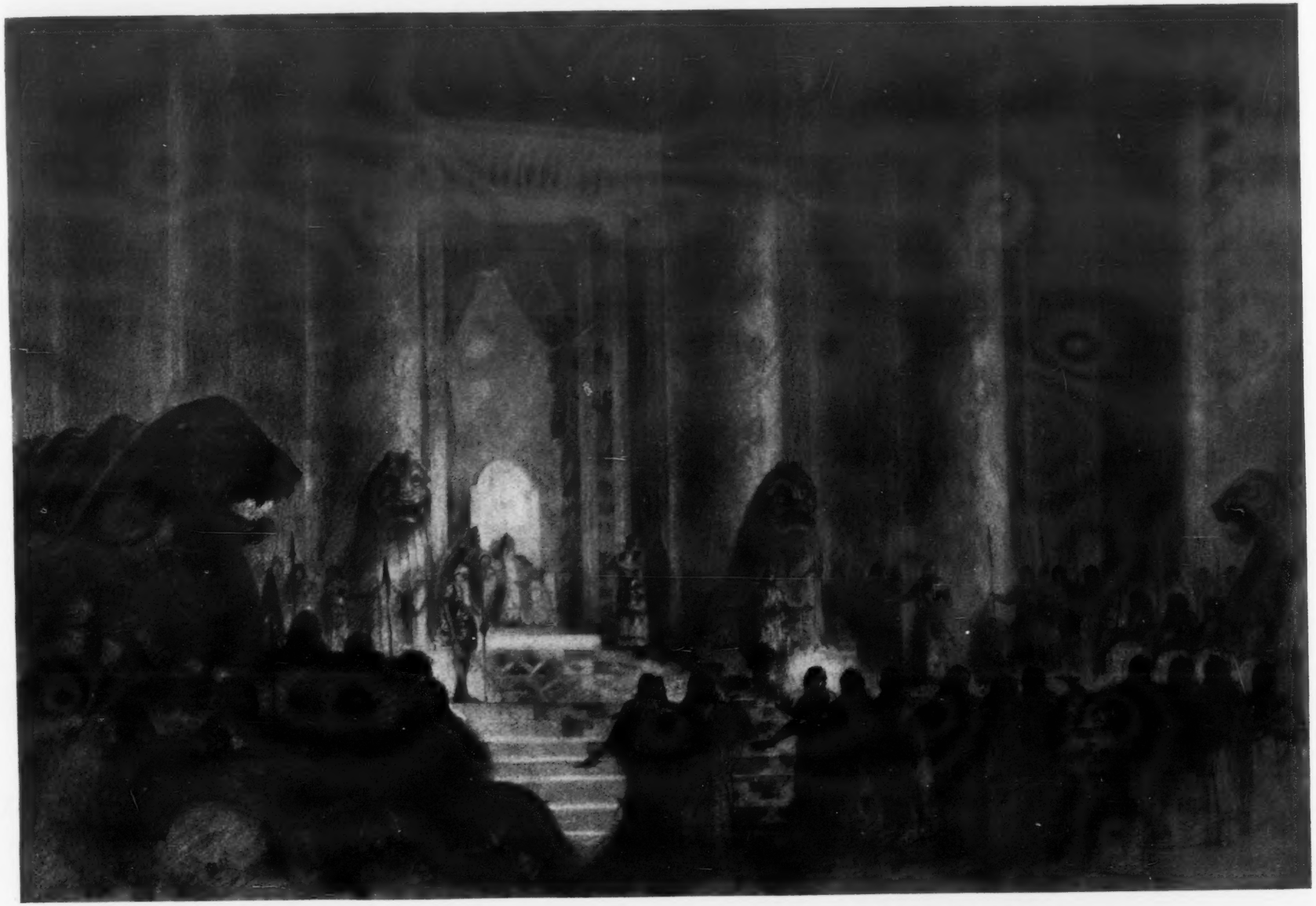


INTERIOR—KING SOLOMON'S PALACE—RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.

RENDERING BY HUGH FERRISS *HELMLE AND CORBETT, ARCHITECTS.*

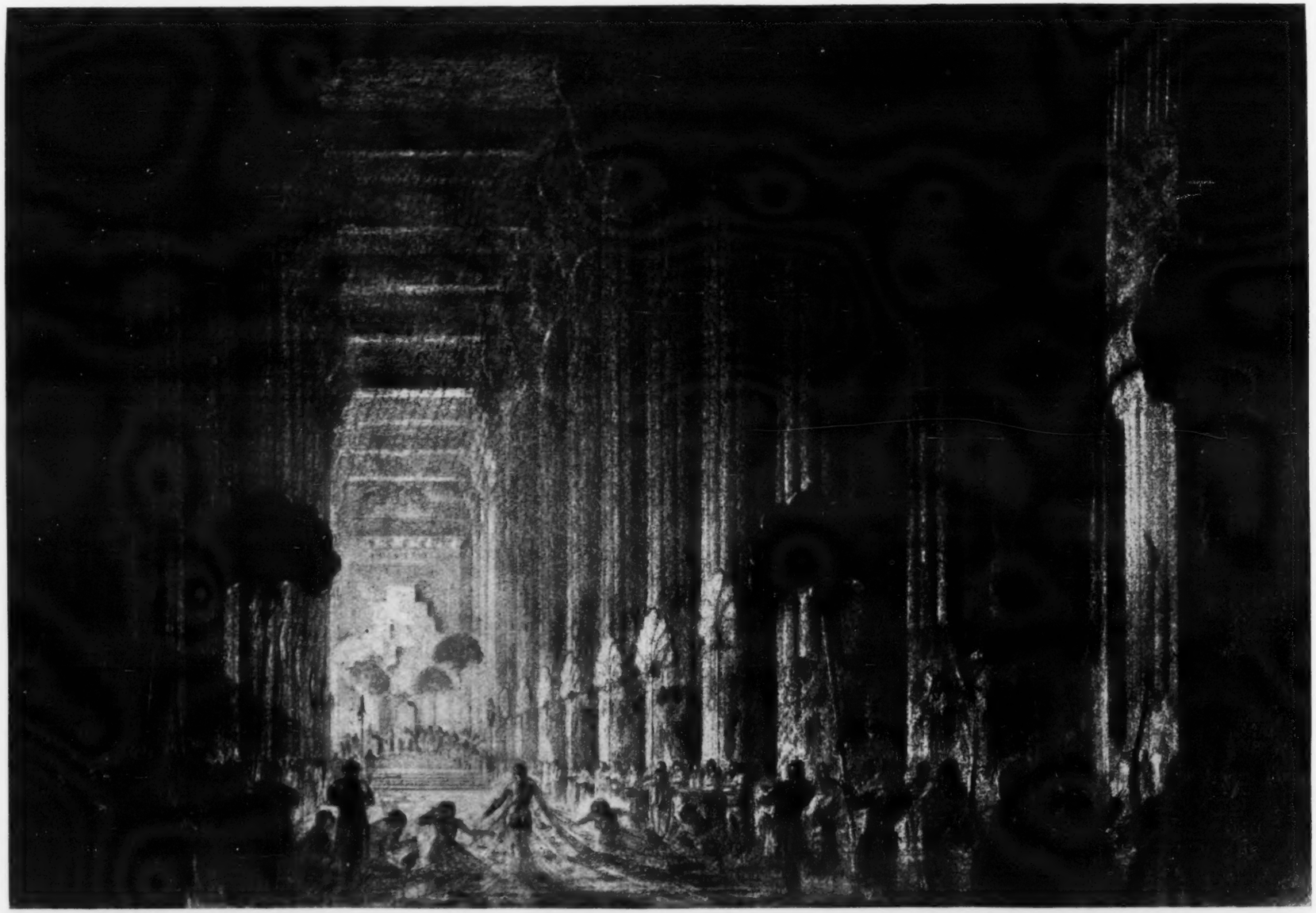
"PORCH OF PILLARS"—RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.

RENDERING BY HUGH FERRISS *HELMLE AND CORBETT, ARCHITECTS.*



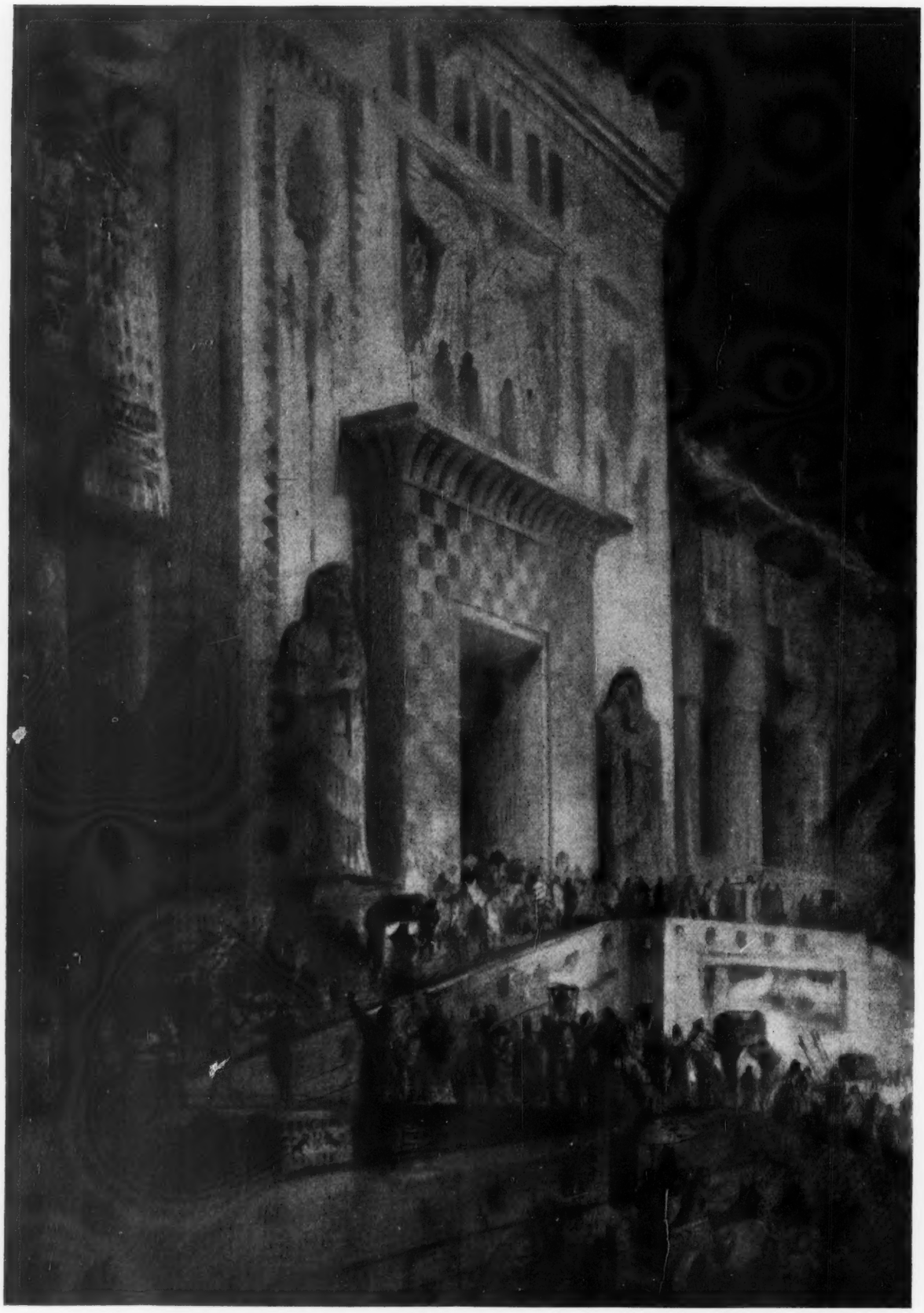
"PORCH OF JUDGMENT"—RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.

RENDERING BY HUGH FERRISS *HELMLE AND CORBETT, ARCHITECTS.*

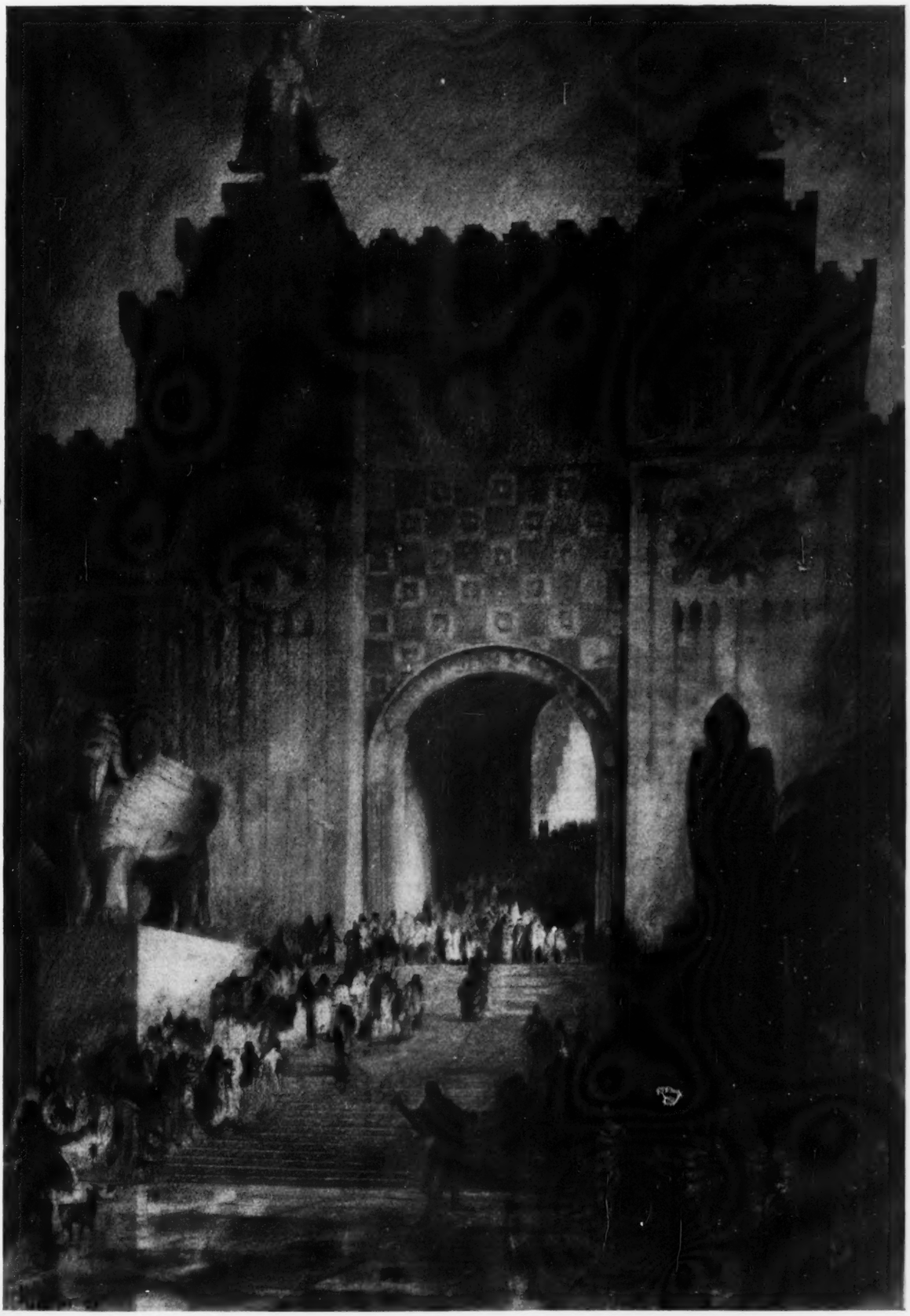


INTERIOR—"HOUSE OF THE FOREST OF LEBANON"—RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.

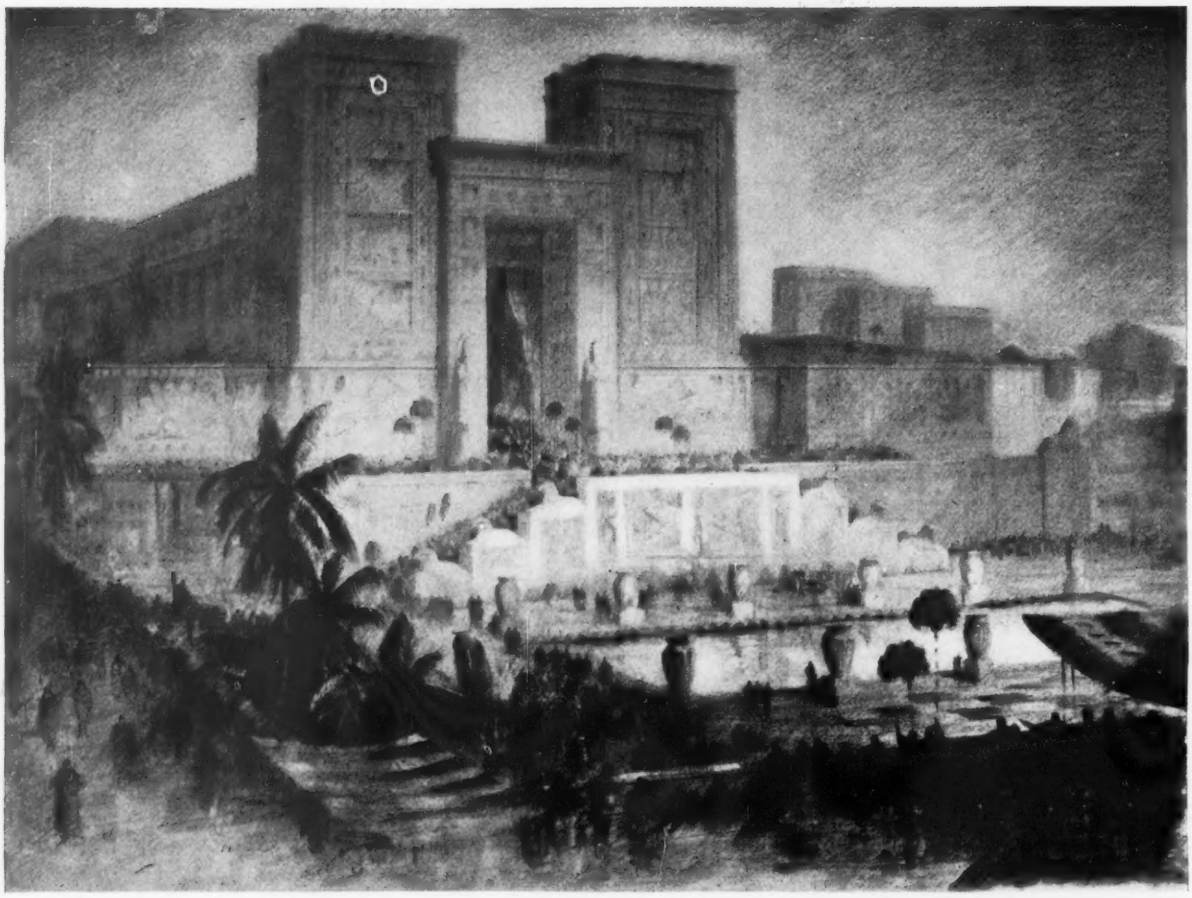
RENDERING BY HUGH FERRISS *HELMLE AND CORBETT, ARCHITECTS.*



KING SOLOMON'S PALACE—RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.
RENDERING BY HUGH FERRISS *HELMLE AND CORBETT, ARCHITECTS.*



THE GATE TO THE "INNER COURT"—RESTORATION OF KING SOLOMON'S TEMPLE AND CITADEL.
RENDERING BY HUGH FERRISS *HELMLE AND CORBETT, ARCHITECTS.*



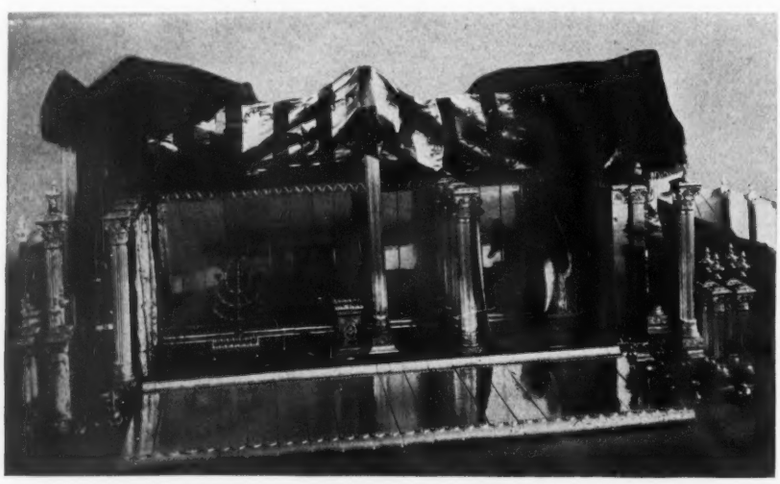
EXTERIOR—"THE HOUSE OF THE FOREST OF LEBANON."

RENDERING BY HUGH FERRISS *HELMLE AND CORBETT, ARCHITECTS*

esting features of the reconstruction at Philadelphia will be the rebuilding of the palace, adjoining the temple grounds, which the King built for his Egyptian wife.

The entire Citadel of Jerusalem will be reconstructed at Philadelphia embracing, besides the Temple, King Solomon's Palace, "The House of the Forest of Lebanon", "The Queen's Palace", "Porch of the Pillars", and other structures. The entire Citadel was enclosed within military walls which began at the bottom of the mount. The large court will be 400 ft. by 200 ft. beyond which, within its terraced court on a higher level, will be the impressive pile formed by The Holy Place, The Most Holy Place, and The Great Porch. The latter will rise 300 ft. in white and gold against the sky as a step back tower of majestic effectiveness.

EUGENE CLUTE.



Dr. Kelchner's Model of the Tabernacle of Israel.

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NOVEMBER, 1925

THE AMERICAN ACADEMY IN ROME.

AT A meeting of the Board of Trustees of the American Academy in Rome held on October 6th, John Russell Pope was elected a Trustee of the Academy as successor to the late Breck Trowbridge. Mr. Pope was the first man to win a Fellowship (in 1895) at the American Academy in Rome, then the "American School of Architecture." He is one of the most distinguished alumni of the American Academy.

Henri G. Marceau has completed his three-year term as Fellow in architecture at the Academy and returned to this country to take a position to teach architecture in the University of Pennsylvania.

The other Fellows in the fine arts to complete their terms this year are Alfred E. Floegel, painter, Lawrence T. Stevens, sculptor, and Randall Thompson, composer.

The newly-appointed Fellows, five in number, sailed from New York, Sept. 22d, to begin their work at the Academy about October 1st. The Trustees and Alumni Association gave a dinner in their honor at the Century Club on the evening before they sailed.

Professors Charles R. Morey and B. L. Ullman will be the new classical professors at the Academy this year, and W. Symmes Richardson, of the firm of McKim, Mead & White, will be Annual Professor in Fine Arts. Mr. Richardson has purchased a villa for a home adjoining the Academy property on the Janiculum Hill in Rome.

The annual appointments to Fellowships in 1926 will again include a Fellow in landscape architecture; this appointment is made only once every three years.

A. Phimister Proctor, the famous animal-sculptor, will occupy a studio at the Academy in Rome this year, working on an important commission.

THUMB TACK CLUB OF DETROIT.

THE FIFTH Annual Architectural Exhibition of the Thumb Tack Club of Detroit will be held in the Galleries of the Institute of Arts from November 11th to 26th. The exhibition is not local in any sense as it will include the work of the leading architects throughout the country.

COMPETITION FOR HOUSE BEAUTIFUL COVER DESIGNS.

THE HOUSE BEAUTIFUL Cover Competition has been an annual event now for the past three years. The announcement of the Fourth Competition contains an addition to the usual quota of prizes. The First Prize is $500, the Second Prize, $250. In addition to these, this year, and in addition also to the possible purchase price of a design, is offered a Special Prize of $100 with a Certificate of Merit, for the best design submitted by a student of any School of Art. The Competition closes January 29th, 1926. Full particulars regarding it may be obtained from the Competition Committee, *House Beautiful*, 8 Arlington Street, Boston, Mass.

PRODUCERS' RESEARCH COUNCIL TO MEET.

THE SEMI-ANNUAL meeting of The Producers' Research Council, Affiliated with the American Institute of Architects, will be held in Chicago on November 10th and 11th at the Club House of the Chicago Chapter, A.I.A.

The meeting will be addressed by Mr. N. Max Dunning, Technical Director of the Scientific Research Department A.I.A.; Mr. Harry Wheelock, President of the Chicago Chapter, A.I.A.; and Mr. Charles E. Fox, President of the Illinois Society of Architects.

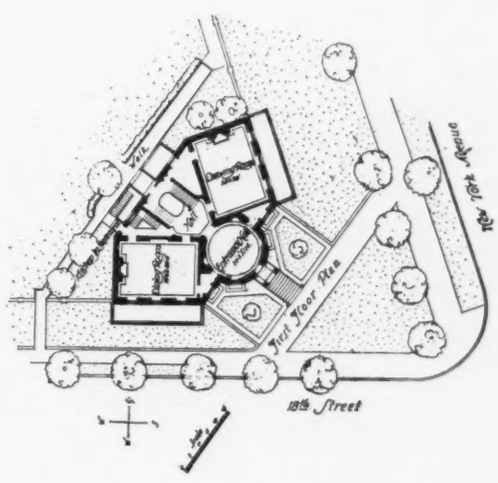
A cordial invitation is extended to all architects to attend all sessions of the meeting.

THE T SQUARE CLUB OF PHILADELPHIA.

AT OUR Annual meeting the T-Square Club enacted certain amendments to the By-Laws where-by we now have a Titular President and a First and Second Vice-President. This is quite a departure but one which links the Club with the Philadelphia Chapter in just one more way in addition to its former ties. At the present time a definite active program is rapidly forming which is likely to further tie the University of Pennsylvania to the activities of the T-Square Club.

We feel, as members of the T-Square Club, a peculiar cooperation with the Philadelphia Chapter, A.I.A., and the University of Pennsylvania in that we endeavor to carry on the old precedents of the T-Square Club, forming a sort of "training school" from which the University draws many students and The Philadelphia Chapter members obtain many trained and experienced draftsmen. In addition to this we have in our daily GRUB CLUB a place where Architects, Draftsmen and Atelier Men come together in an association which is too important and subtle to describe.

The T-Square Club officers for 1925-1926 are as follows: President, Paul P. Cret; First Vice-President, Walter Antrim; Second Vice-President, Roy F. Larson; Secretary, Louis E. McAllister; Treasurer, Roy W. Banwell.



FIRST FLOOR PLAN, THE OCTAGON HOUSE

(See page 89 for announcement of Competition)

OTTO JOHN TEEGEN

OTTO JOHN TEEGEN has been awarded the Julia Amory Appleton Fellowship by Harvard School of Architecture. This scholarship is granted every other year and entitles the holder to one and one half year's study abroad.

Mr. Teegen was born at Davenport, Iowa, and attended school there. He entered Harvard College and was graduated from the College of Fine Arts with distinction, and later from the Graduate School of Architecture. He is a member of Phi Beta Kappa and for the past year has been in the office of Schultz & Weaver, Architects, New York. Mr. Teegen sailed for Europe last month and plans to spend part of his time at the American Academy in Rome. He wishes to express his appreciation to Professor Jean Jacques Haffner, of Harvard, for his help and interest.

THE NEW YORK ARCHITECTURAL CLUB, INC.

The Architectural Bowling League Section

THIS really ought to be entitled despatch No. 6⅞ or whatever it is that the War Correspondents call such things, for we have just returned from the battle front at Thum's Alleys, where we have witnessed, from the safe vantage of neutrality on this, our night off from hostilities, the third skirmish in this terrible war for supremacy in the bowling race. We would certainly give it such a title, if it weren't that we lack a list of casualties, and we understand that that is absolutely essential with war scribes.

We are sorely tempted to crib the slogan of a famous American entertainer and call it the "Greatest Show on Earth," but on second thought, we feel that that would be too modest. For you see, old P. T. B., talented though he was in such things, never was able to put on a show in which the participating characters naturally registered hope, fear, disappointment, disgust or radiated contagious smiles of pleasant satisfaction in quick succession and all inside of five seconds of time. Not to mention the pushing, tugging and pulling, gymnastics, contortions and acrobatics performed behind the foul line. We are speaking of your true bowling enthusiast in action. It surely is a treat for sore eyes.

Incidently, we are seriously considering the introduction of a resolution to bar all bosses and employers from the scene of strife. We have grave fears that, should they observe too often the amount of energy and labor exerted by the men on the alleys, that they would effect radical reforms in the drafting rooms, and that would be calamity incalculable. The ruling might be ineffective at that. The aforementioned bosses and employers might shuffle in on us disguised as draftsmen.

It was "Ladies' Night" on the alleys (bless 'em all) and a good number of the fair sex honored and cheered us with their presence. Under compulsion we might admit that our vision may have been slightly blurred, but we are almost positive we counted between 40 and 50 heads, and all pretty is what we mean. Mr. Henry G. Poll was chairman of the festivities and with the able assistance of Messrs. Emil Capel, Paddy Lynch and Don Campbell, he carried things through as proudly as a Major-General. If it weren't for the difference in rank, we would say as proudly as a top sergeant. Everyone knows that no mere General has it on a top-kicker for snap and pride.

Alleys No. 9, 10 and 11 were reserved exclusiveiy for the use of the ladies, on which an impromptu tournament was arranged, with three prizes to be tourneyed for.

Mrs. Corry won first prize, a handsome silk umbrella, with the tidy score of 134. Just out of mere curiosity, we stepped over to one of the other alleys, where Mr. Pat Corry was bowling on the Warren & Wetmore team, and we were shocked with surprise to see that he had just finished a game with a score of 98. Pat must have been considerably chagrined himself, because he turned right around and doubled his score in the next game. We earnestly hope that no serious dissension of superiority disturbed the tranquility of the Corry family as a result.

Miss Haurman won the second prize, which was a box of fine chocolates, and which we hope she enjoyed. We know that they were fine, because we had the pleasure of being among the very first to sample them.

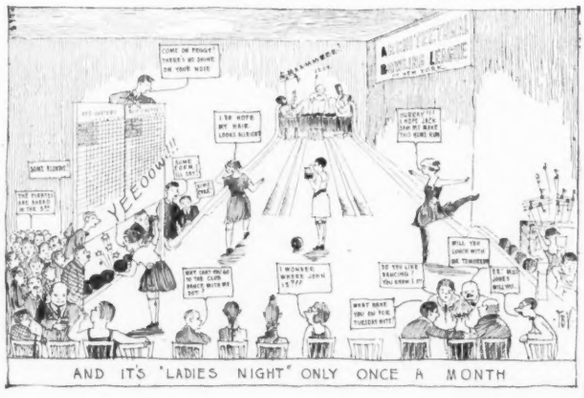
The third prize, a set of ten-pins, 3 inches high, was captured by Miss James, which makes it advisable for the other ladies to look to their laurels in the future.

The West End Ladies' Trio of radio fame entertained the contestants with appropriate music, and combined with the refreshments provided for the occasion, a good time was had by all. Yes, sir, we repeat, Henry did himself proud. He was just elected Treasurer of the league, and perhaps that had something to do with it. We wonder what he could do if we gave him the treasury.

Thursday, October 8th, was presentation day on the alleys, upon which occasion the retiring officers of the league were presented with handsome gold watches, in appreciation of their unselfish and untiring efforts. They were Messrs. Joseph A. Finegan, Norman T. Valentine, Henry G. Poll and H. R. Hutchinson.

It is too early at this writing to give the standing of the teams, but one thing seems certain, and that is that no team has a walkaway. It's give and take all the way. We will publish the standing of the teams in the next number, perhaps accompanied by more interesting cartooning by our own "Art Staff".

HENRY SASCH,
Secretary.



Cartoon By the "Art Staff" of the Architectural Bowling League.

THE NATIONAL HEADQUARTERS OF THE AMERICAN INSTITUTE OF ARCHITECTS, WASHINGTON, D. C.
The Octagon House, Dr. Wm. Thornton, Architect, 1761-1828.

ANNOUNCEMENT OF NEW COMPETITION FOR
THE OCTAGON HOUSE INSCRIPTION

EARLY in the year prizes were offered in a competition which closed April 1, 1925. It was expected that awards would be made at the Exhibition in connection with the 58th Convention in April. The Jury, of which Mr. Howard Van Doren Shaw acted as Chairman, reported that none of the designs submitted were suitable for the purpose and the Jury decided to make no awards. This result was a disappointment to the undersigned as it must have been to those who sent in drawings. Most of the designs submitted were too ornamental and out of scale with the building, while others were not in keeping with the dignity of the building.

A new competition is hereby announced and those who have made studies are urged to revise them or make new ones for submission. Entry, of course, is free and additional copies of the program may be had on application to The Octagon House, Washington, D. C.

The Building Committee desires through a competition to secure a design for a tablet, sign, or historical device which will be dignified and refined and at the same time sufficiently conspicuous to attract the attention of the passerby. The purpose is to inform the public as to the historic and architectural importance of the building.

The following inscription is suggested:

The Octagon House
Erected in 1800
Occupied by President Madison when
the White House burned in 1814.
The Treaty of Ghent was ratified here.
Headquarters of
The American Institute of Architects

The inscription may be varied at the pleasure of the competitors.

It is suggested that the memorial device take the form of a wall tablet to be fastened to the building, or an inscription in individual bronze letters let into a stone or granite sidewalk leading to the front entrance, or a sign on a pole or standard. Each competitor is at liberty to follow any idea of his own or to suggest an alternative.

Competition is open to all architects and draftsmen.

Drawings should not exceed 24" x 36".

Rendering and scale at option of competitor.

Drawings shall be delivered anonymously to D. Everett Waid, 1 Madison Avenue, New York, N. Y., on or before January 1, 1926, with the name and address of the competitor enclosed in a plain sealed envelope.

Prizes will be awarded by the Building Committee as follows:

First Prize	$150
Second Prize	100
Third Prize	50

The Jury reserves the right to withhold any prize if in their opinion an award is not deserved.

The Building Committee shall have the option of using any designs or suggestions upon according due credit to the authors.

Signed, THE BUILDING COMMITTEE

Frederick L. Ackerman	Robert D. Kohn
Grosvenor Atterbury	O. J. Lorehn
William P. Barney	E. P. Mellon
Edwin Bergstrom	Charles A. Platt
Glenn Brown	H. W. Sellers
D. H. Burnham	Howard Van Doren Shaw
J. E. R. Carpenter	A. H. Stem
E. W. Donn, Jr.	Seth J. Temple
Albert Kahn	Jos. Van Vleck
Wm. M. Kendall	A. M. Welch
Fiske Kimball	D. Everett Waid, *Chairman.*

THEODORUS HOFMEISTER

WINNER OF TRAVELING SCHOLARSHIP

CHICAGO is already training its architects of the future who will design the magnificent passenger stations of the airplane lines that are to carry travelers to all parts of the globe.

Viewing the future populous highways of the air, and the world port that will be established here, the Architectural Sketch Club of Chicago assigned the "Airport Station" as the year's subject of its annual open competition for the Foreign Traveling Scholarship.

The prize winner, Theodorus Hofmeister, 27 years old, first of the twelve competing student architects, has designed an airplane station adapted to modern air travel.

For his work he is now possessor of the $1,000 prize that gives him the privilege of a year's travel in Europe.

He will start on his trip early this fall. The winter will be spent in studying under Dutch architects in Amsterdam, Holland, where he was born.

Then as the weather moderates Mr. Hofmeister will begin with northern France and gradually pursue his way southward to Italy, where he plans to remain for some time.

THE BOSTON ARCHITECTURAL CLUB.

THE Boston Architectural Club, one of the oldest architectural organizations in the country, remains today practically unique in the work that it does for the younger men of the profession.

The character of the Club work is attested to, this year, by the fact that three of its men have won distinction within the last few months.

Edward F. Allodi is just taking up his work at Princeton as winner of the Princeton Architectural Scholarship for 1925-1926. He writes that he owes everything "to those men who have made possible the class work of the Boston Architectural Club—and also to those among my employers who have encouraged and aided me in the pursuance of my architectural ambitions."

This tribute will help to hearten the officers of the Club to continue their efforts unflaggingly!

Allodi was born in Palermo, Italy, in 1902. His schooling was in the Boston public schools, elementary and high. He began work in 1917 in the office of Edward F. Stevens of Boston. In 1918 he joined the Club and took courses in design, life drawing, and construction. Meanwhile he has had experience in some of the best offices in the city.

Another Club boy, Walter F. Bogner, has had the distinction of winning the coveted Rotch Travelling Scholarship. It is the oldest architectural scholarship in America, this being the fortieth year in which an award has been made. The scholarship provides for two years of travel abroad.

Bogner, born in Rhode Island, lived during his school years in Bohemia. Later he returned to the United States and in 1922 came to Boston and studied in the Boston Architectural Club atelier, while working in an architect's office daytimes. He is thoroughly an artist and finds highest joy in the work of his profession and most stimulating recreation in the enjoyment of music. Even while in the heat of his competition he went repeatedly to the Symphony for relaxation and exhilaration.

A third member of the Club who has just achieved distinction is Edward D. Stone, winner of the special student scholarship at Harvard for 1925-26. After graduating from the University of Arkansas in 1922, he entered the office of Strickland, Blodgett & Law, in Boston, and later has been employed by Coolidge, Shepley, Bulfinch & Abbott. During the last three years he has attended the courses in design offered by the Boston Architectural Club.

The atelier of the Boston Architectural Club in which these men were trained, is described by Prof. Haffner of the Department of Architecture at Harvard, as "the only place in America where the spirit of the ateliers of the *Ecole des Beaux Arts* is duplicated." It is certain that peculiar benefits derive from the form of organization existing at the Boston Architectural Club. The Club is managed entirely by the members, a majority of whom are draftsmen, and who determine the policies of the Club,—social, educational and financial.

The atelier is self-governed and has developed a spirit and a tradition which may well have elicited from Prof. Haffner the words of enthusiastic encomium quoted above. For some years the work of this atelier has been related to that of Harvard University and the Massachusetts Institute of Technology through the "conjunctive problems" in which the drawings have been jointly exhibited and premiated, and have reflected great credit upon the members of the Club atelier.

Financially the Club has had a unique career. With annual dues that have but recently been raised to $15.00 it has had the fee of a very valuable piece of real estate, on the coveted top of Beacon Hill, in the very shadow of the State House. Here the members are served a luncheon every workaday noon of the year, and here in the Great Hall, of a winter evening, they hold their masques and revels, or dine and toast the newly announced winners of the "Rotch" and the various other prizes.

WALTER F. BOGNER.

THE INDIANAPOLIS ARCHITECTURAL CLUB

THE Indianapolis Architectural Club announces the results of a recent competition in which architectural books and portfolios were given as prizes. The winners are as follows:

FIRST PLACE

Joseph D. Small ..... Frederick Wallick, archt. 308 Hume-Mansur Bldg. Indianapolis, Ind.

SECOND PLACE

Max Winchel ..... Pierre & Wright, 1133 Hume-Mansur Bldg. Indianapolis, Ind.

THIRD PLACE

Lois Ellyn McCrary ..... Pierre & Wright, 1133 Hume-Mansur Bldg. Indianapolis, Ind.

MENTION

N. A. Owings.
Leslie F. Ayres.

The Club also announces the following program of Fall activities:—

TUESDAY NOON MEETINGS

Nov. 3—Grier Shotwell.
Nov. 10—Clyde Stoughton—"Photography"
Nov. 17—Leslie Colvin—"Criticisms from a Contractor."
Nov. 24—B'd of Fire Underwriters—"How an Architect may use them."
Nov. 31—Emerson Chaillé—A Realtor's criticism of an Architect"

BANQUETS

Nov. 19—Edgar Hunter—"What an Arch't sees on a pleasure trip around the world.."

EDWARD D. STONE.

EDWARD F. ALLODI.

SAINT LOUIS ARCHITECTURAL CLUB.

THE FIRST regular meeting of the St. Louis Architectural Club for the season 1925-26 was held on Thursday evening, October 1st, at the Clubhouse, 514 Culver Way. The affair was in the nature of a smoker, and the speaker for the evening was Dr. W. C. Bitting, recently retired pastor of the Second Baptist Church in St. Louis. His talk was informal, dealing with his philosophy of life in general, his activities in the field of archaeology, and finally his experience with architects, notably in connection with the building of the present home of the Second Baptist Church on Kingshighway from Washington to McPherson Avenue.

This building was erected eighteen years ago, two years after Dr. Bitting's acceptance of the pastorate. It is perhaps the best example in the United States of the Italian Gothic Style of architecture and for many years has been a favorite subject for sketches with all the students of architecture in St. Louis. The architects for this church were Mauran, Russell & Garden of St. Louis. Equally as interesting as the design of the building is the combination of building materials,—dull colored terra cotta, brick of five different shades ranging from browns to yellows, and dull red tiles on the roof. Interesting iron grilles and tie rods are other features, and most beautiful of all is the enclosed garden with its pool of water which reflects the campanile.

The evening school maintained by the Club opened its classes on October 2nd, with eighty-five students enrolled. Courses are given in Elementary, Intermediate and Advanced Design, Shades and Shadows, Perspective, Free-Hand Drawing, History of Architecture, and in Construction. The evening school is affiliated with the day school maintained at Washington University.

PRATT INSTITUTE ALUMNI

PRATT Institute Alumni Architects meet for luncheon on Tuesdays at twelve thirty, at the Fraternity Clubs Building, 22 East 38th St. Every P. I. Alumni Architect welcomed. Plans are being made for an evening get-together. For particulars write E. S. Anderson, 713 West 175th St., New York.

PERSONALS

D. WENTWORTH WRIGHT has opened an office for the practice of architecture at 9 Highland Place, Maplewood, N. J., where he will specialize in residential work.

FRANKLIN COX STANTON has opened an office for the general practice of architecture in the Capital National Bank Bldg., Olympia, Washington.

JERRY LOEBL AND NORMAN J. SCHLOSSMAN, Architects, have formed the organization of Jerry Loebl and Norman J. Schlossman, Architects, with offices at 612 No. Michigan Boulevard, Chicago, Ill.

THOMAS E. HIBBEN is now associated with Robert Frost Daggett for the practice of architecture under the name of Daggett and Hibben, Architects, 920 Continental Bank Bldg., Indianapolis, Ind.

ISIDOR RICHMOND, Architect, has opened an office at 248 Boylston St., Boston, Mass.

JAMES S. ANGUS MERCER retired from the New York State Department of Architecture on September 1st after many years of service.

RONALD W. CATTO AND DOUGLAS E. CATTO, formerly associated under the firm name of Ronald W. Catto, Registered Architect, have formed a partnership under the firm name of Catto and Catto, Architects, with offices at Brock Chambers, Toronto 2, Ontario.

LEWIS H. RUSSELL, ARCHITECT, has removed his office to 300 Taylor St., Chevy Chase, Md.

ELMO C. LOWE has retired from the firm of Granger, Lowe & Bollenbacher, Architects, and has opened an office to continue the practice of Architecture under his own name at 630 Church St., Evanston, Ill.

LOUIS A. BROWN, JR., announces the opening of an office at 28 Castleton Park, St. George, S. I., where he will conduct a complete architectural drafting service.

Anyone knowing of the whereabouts of Mr. Charles Deas who formerly practiced architecture in Memphis, Tenn., is requested to aid us in locating him.

PUBLICATIONS

OF INTEREST TO THE SPECIFICATION WRITER

(Other items on pages 103 and 104)

Contractor's Atlas.—Periodical issued in the interests of architects and builders. The July-August number contains an interesting article on the Eastern Hills Reservoir, Cincinnati, with drawings, principles of design and construction, etc. Atlas Portland Cement Co., 25 Broadway, New York City.

Tapestry Brickwork.—Brochure illustrated in color containing both exterior and interior treatment. 48 pp. 8 x 11. Fiske & Co., 25 Arch St., Boston, Mass.

Flooring Specifications.—Folder with detail drawings in standard filing size covering Rubberstone specifications. Flooring over Portland Cement, wooden floors, stair treads, etc. are covered. Rubberstone Corporation, 1400 Broadway, New York.

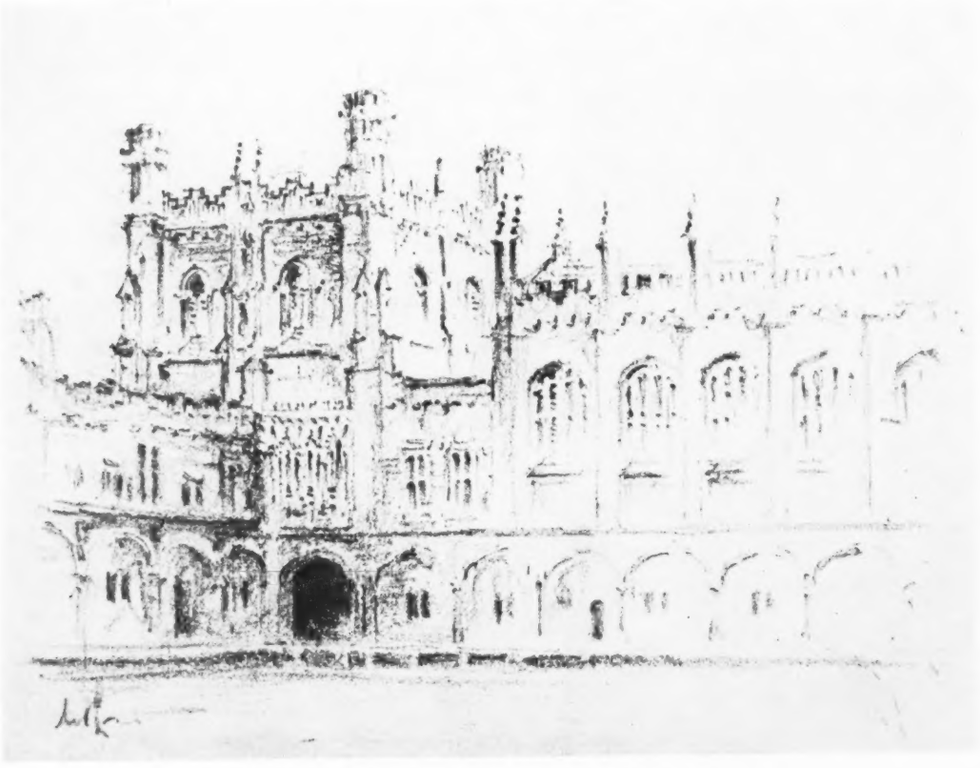
Terrazzo.—Treatise by Pasquale Galassi covering subject of Terrazzo work, under twenty-nine different headings and forming a basis for a perfect specification. Samples of brass strip will be sent with the specifications. Galassi Company, 345 Lexington Ave., New York.

Minwax Flat Finish.—A.I.A. Classification 25-c-11. Color card and specifications with twelve panels in full colors covering flat finish for wood floors and trim. Minwax Co. Inc., 10 East Huron St., Chicago.

Fifty Years.—Commemorative Brochure covering the period from 1875 to 1925 showing the development of the Holtzer-Cabot organization and its products within the period indicated. Much interesting historical and technical data presented in non-technical and readable form. 50 pp. 8½ x 11. Holtzer-Cabot Electric Co., Boston, Mass.

PARTNERSHIP WANTED.

An architect registered in New York and Pennsylvania desires to make a partnership arrangement with a good architect or firm. Good all around man, qualified in both design and construction but preferring the practical end of the work. Thirteen years' experience. Capable of handling draft-room, superintendence, etc. Box 300 care Pencil Points.



LITHOGRAPHIC CRAYON DRAWING BY WENDELL P. LAWSON

Christ Church, Oxford. Corner of the Great Quadrangle.

FROM THE PITTSBURGH CHAPTER, A.I.A.

Pencil Points,

Gentlemen:

The Pittsburgh Chapter of the American Institute of Architects has noted with concern the proposal to destroy the Allegheny County Jail Building. This organization has studied the subject with care and wishes to submit herewith certain specific and practical suggestions which are designed (1) to clear off some of the area now occupied by the jail structure, as a concession to traffic needs; (2) to make a modification of the present use of the structure; and (3) to retain the original and most interesting portion of the structure as a combined utilitarian building and architectural monument. Therefore, the Pittsburgh Chapter, A. I. A., submits the following recommendations, requests your serious consideration thereof, and bespeaks the favor of a specific comment and reply.

Recommendation No. 1—It is recommended that the present Allegheny County Jail Building be restored to its original area and exterior condition as designed by Henry Hobson Richardson, one of the greatest American Architects; and that the interior of the original Richardson jail be remodeled to serve as a County "Hall of Fame."

Recommendation No. 2—It is recommended that such a solution of the thorofare, bridge-approach, and kindred city planning problems of the jail locality be adopted as will adequately meet the City's present and future traffic requirements and will not prevent the restoration of Richardson's architectural masterpiece as a necessary, utilitarian, and dignified building. It is confidently asserted that this building will prove a credit to the municipality and an appropriate companion to both the adjacent public buildings and to the mercantile developments that will inevitably follow the completion of the Liberty Bridge.

With respect to these recommendations, the Pittsburgh Chapter of the A. I. A. desires to say:

(a) The accumulation of public records has made the question of their safe and accessible housing in a "hall of records" an obligation not much longer to be neglected. The cost of acquiring an expensive site near the Court House together with the cost of erecting a suitable hall of records building might be expected to agitate the taxpayers if the present suggestion were not so pertinent and satisfactory.

(b) To restore the jail building to Richardson's original design will necessitate the removal of the forbidding looking wall of the jail yard, the diagonal north-east wing, parts of the north wing and the east wing, and, perhaps, some other minor portions.

(c) It is granted, of course, that the encroachment of the jail structure upon Diamond Street, should be corrected.

(d) The Pittsburgh Chapter A.I.A. is concerned to tender its services to public officials, in advisory capacity, during the development of the suggested alterations, so that a great architectural monument may not be unduly mutilated or destroyed; or this Chapter will undertake to promise, on behalf of its parent body, the American Institute of Architects, that an advisory committee will be appointed for the same purpose by the President or Board of Directors of the Institute.

The Pittsburgh Chapter has been careful to ascertain that a feasible plan, meeting the conditions of the Chapter's second recommendation, has actually been devised. No doubt this plan will be made public at the proper time by the City Planning Commission, inasmuch as that department of the City government is now engaged, by direction of the City Council, in developing general plans of which the plan here mentioned is a part.

The subject matter of the present communication has been given very careful study by this Chapter and by a special committee appointed for the purpose. A formal resolution of the Chapter is, for your further information, quoted in full as follows:

"WHEREAS the group of buildings known as the Allegheny County Court House and Jail has been for years recognized, in this and foreign countries, as an American architectural monument of outstanding merit; and its architect, Henry Hobson Richardson, who is placed among the greatest architects of this country, regarded this group as his best work; and

"WHEREAS recent serious proposals to destroy the jail portion of this masterpiece have been given considerable commercial publicity; and

"WHEREAS there appears to have been no serious attempt to reconcile the alleged objections to the present use of the jail building and various municipal requirements;

"THEREFORE BE IT RESOLVED that the Pittsburgh Chapter of the American Institute of Architects present to the proper public officials and to local civic bodies, the proposal to reduce the jail structure to its original extent and exterior condition and to remodel the interior to serve as a much needed hall of records, to the end that this architectural masterpiece may be conserved to future generations of Americans as an historic and cultural asset".

Very truly yours,

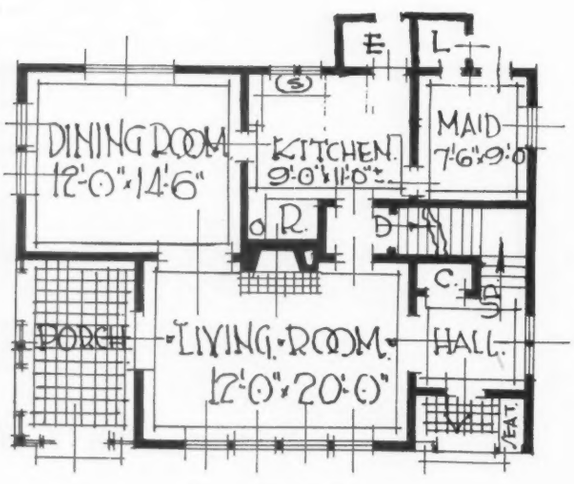
HOWARD K. JONES, President.

THOMAS W. LUDLOW, Secretary.

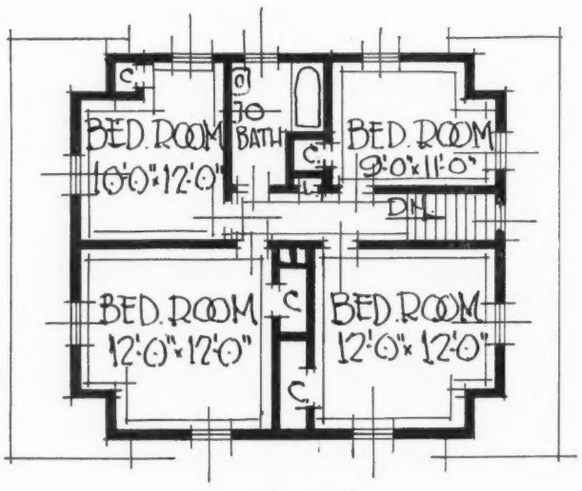
PENCIL RENDERING BY LOUIS KURTZ

Residence for Mr. James M. McCutcheon. W. Stanwood Phillips, Architect.

Perspective.



First Floor Plan.



Second Floor Plan.

DESIGN FOR SMALL SUBURBAN HOUSE

ROYAL BARRY WILLS, Architect.

HERE AND THERE AND THIS AND THAT

CONDUCTED BY RWR

TAKING things, by and large, all things considered and making due allowance for wind and tide, we figure that the first of our monthly competitions has not been such a failure.

It is now known to every pencil pusher throughout the length and breadth and thickness of this broad land, including such suburbs as London and Melbourne, that the stupendous sum of ten dollars is being offered here each month for the most meritorious contributions in four different classifications, as set forth in detail in the issues for September and October. Remember—each competition closes on the fifteenth of each month, the results being announced in the following issue of PENCIL POINTS. The next competition, therefore, closes on November 15th. So if you think you can do better than the prize winners for October, whose efforts are set forth and displayed below, just put a bit of pink ribbon around your manuscript or drawing and submit it for consideration.

WELL, here is the best verse.

Oh, how I love an Architect
For one of them said to me,
"Why don't you build a house, m'lad?
Of rent you'll then be free".
I listened to his blandishments,
I fell for all he said,
Of comfort, style, convenience, pride—
And told him—"Go ahead".

In admiration of his plans
My wife and I were lost;
We said, "That's just the home we want;
What will the building cost"?
He looked the drawings o'er a bit
In an appraising way,
And nonchalantly he answered us,
"Eight thousand, I should say".

To friends and neighbors, far and wide
We said, "We're going to build".
Some of them pitied us and some
With jealousy were filled.
And then, when we could not back out,
We learned, with grievous groans,
An architect's eight thousand house
Costs fifteen thousand bones.

J. M. Moorhead.

---

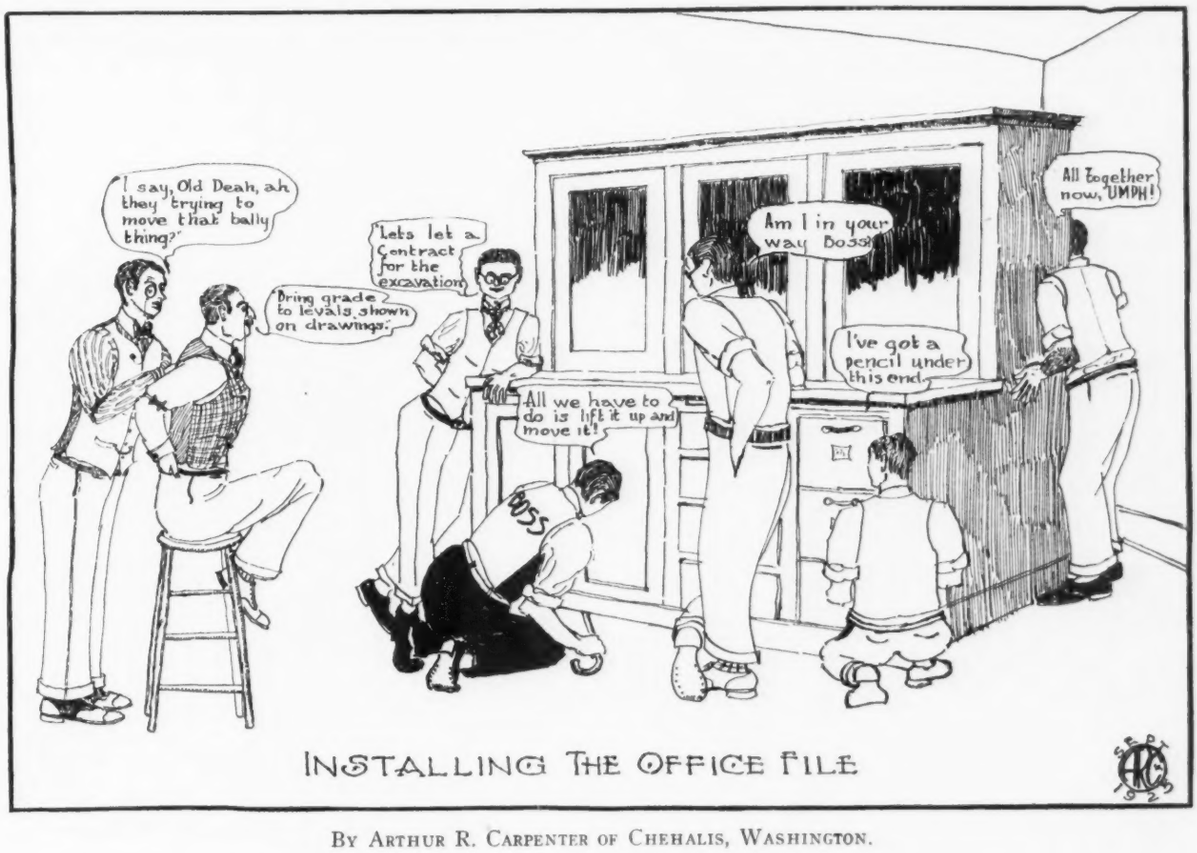
and here are a couple more:

EFFICIENCY

O, isn't it great to be up to date
As we live in this year of grace,
With a reference system to allocate
Our dope in a specified place?

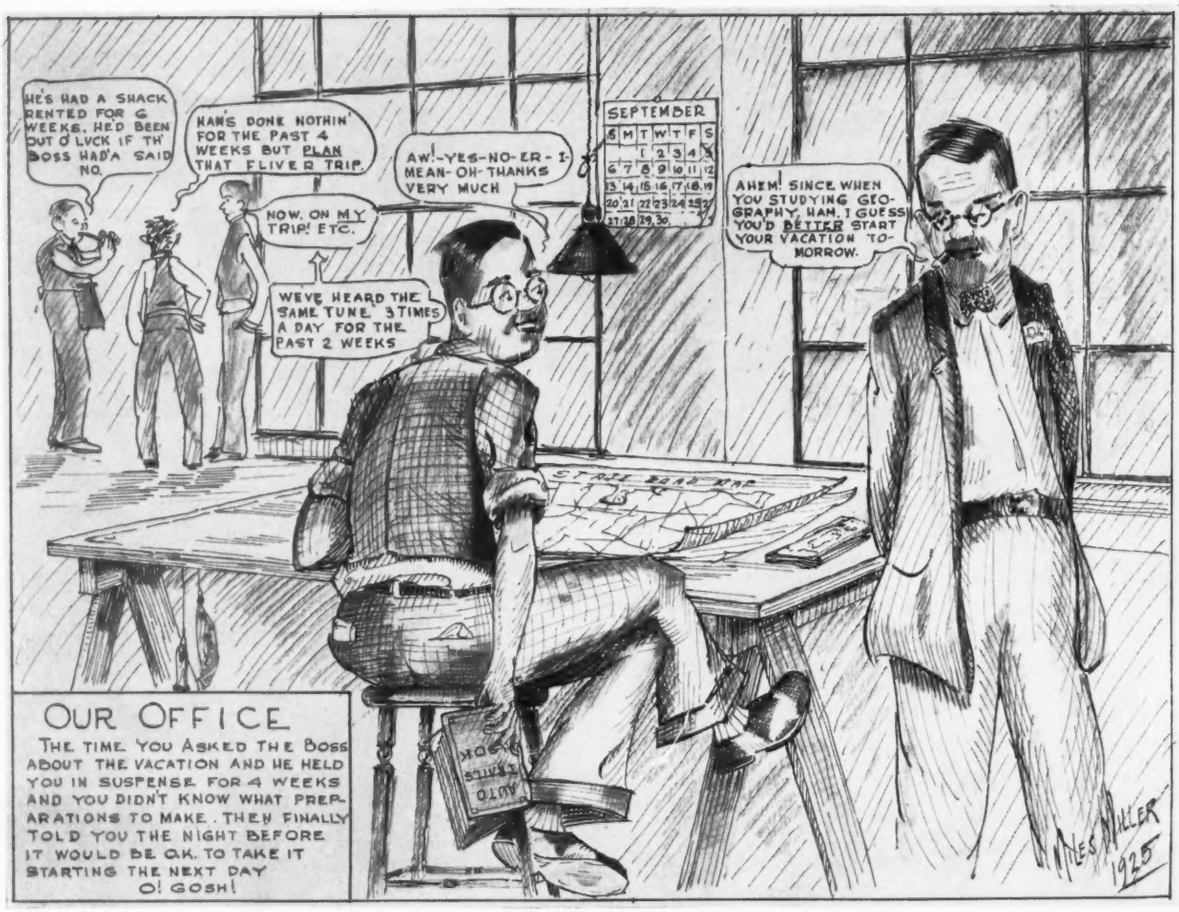
We dully record to prove and safeguard
That "nothing's new under the sun",
But, it takes us so long to find the card
We seldom get anything done

Thos. Rollands


I say, Old Deah, ah they trying to move that bally thing?
Bring grade to levels shown on drawings.
Lets let a Contract for the excavation
All we have to do is lift it up and move it!
BOSS
Am I in your way Boss?
I've got a pencil under this end.
All together now, UMPH!

INSTALLING THE OFFICE FILE

BY ARTHUR R. CARPENTER OF CHEHALIS, WASHINGTON.


HE'S HAD A SHACK RENTED FOR 6 WEEKS. HE'D BEEN OUT O' LUCK IF TH' BOSS HAD'A SAID NO.
HAN'S DONE NOTHIN' FOR THE PAST 4 WEEKS BUT PLAN THAT FLIVER TRIP.
NOW, ON MY TRIP! ETC.
WE'VE HEARD THE SAME TUNE 3 TIMES A DAY FOR THE PAST 2 WEEKS
AW!-YES-NO-ER-I-MEAN-OH-THANKS VERY MUCH
SEPTEMBER
AHEM! SINCE WHEN YOU STUDYING GEOGRAPHY, HAN, I GUESS YOU'D BETTER START YOUR VACATION TOMORROW.
MILES MILLER 1925
OUR OFFICE
THE TIME YOU ASKED THE BOSS ABOUT THE VACATION AND HE HELD YOU IN SUSPENSE FOR 4 WEEKS AND YOU DIDN'T KNOW WHAT PREPARATIONS TO MAKE. THEN FINALLY TOLD YOU THE NIGHT BEFORE IT WOULD BE OK. TO TAKE IT STARTING THE NEXT DAY
O! GOSH!

CARTOON BY MILES MILLER.

Sing a song of six per cent,
Pockets full of dough,
That's what the client thinks
Because he doesn't know.
Poor darned Architect
Knows he's just a slob;
Six per cent is not so much
Unless you've got a job.

Sing a song of six per cent
Arc'tec full of rye;
Million-dollar commissions
Float before his eye;
When the night is over,
How his head does ache!
A yiddish flat at two per cent
Is what he'd gladly take.

R. M. Brogle

AND now we come to the cartoons. The prize is given to Andrew E. Egeressy of New York, a new comer to our pages. There are many amusing things that happen both within and without the office which should be recorded for the benefit of the whole fraternity; so let there be more cartoons!

SKETCHES represent by far the major part of each month's offerings. We are glad of this and hope it will always be so for surely nothing is more important than the development of one's ability to think quickly on a scrap of paper. Here again the prize goes to a new comer, Juliet Peddle. Several other sketches submitted this month are reproduced also, as well as some others received before the prizes were announced.

THE prize for class four goes to Joseph Mink, Jr., New York, for his bookplate designed for the Triangle Club of Yonkers. Remember, class four includes anything and everything not falling within class 1, 2, and 3.

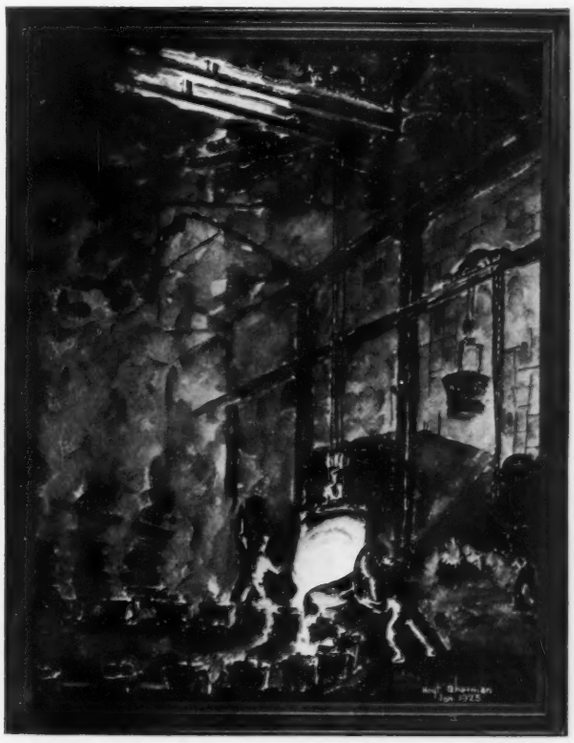
BOOKPLATE BY JOSEPH MINK, JR., NEW YORK
(PRIZE—*Class Four—October Competition*)

SKETCHES

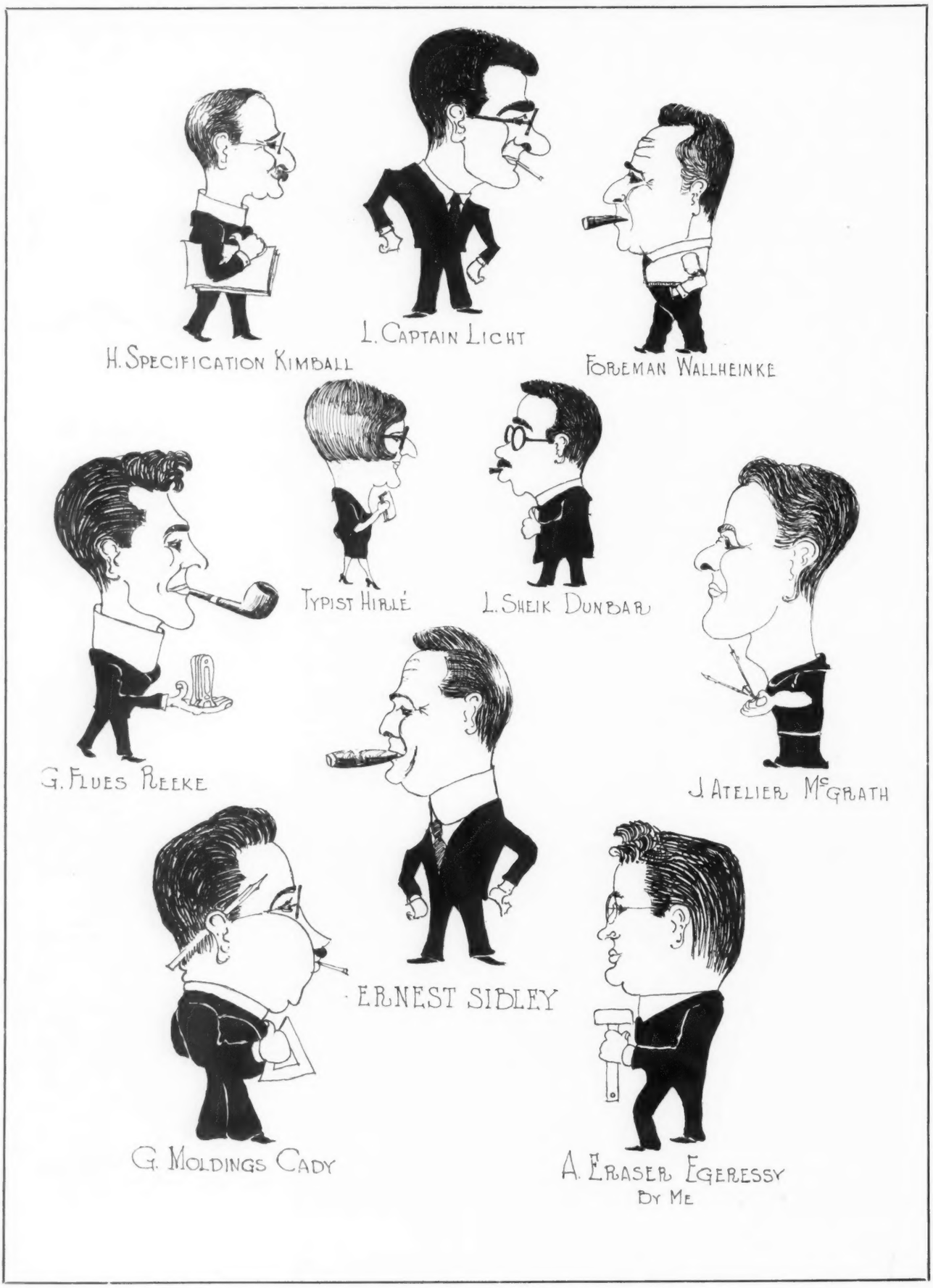
Sketch by Juliet Peddle.
(PRIZE—*Class one—October Competition)*

Sketch by E. Armstrong.

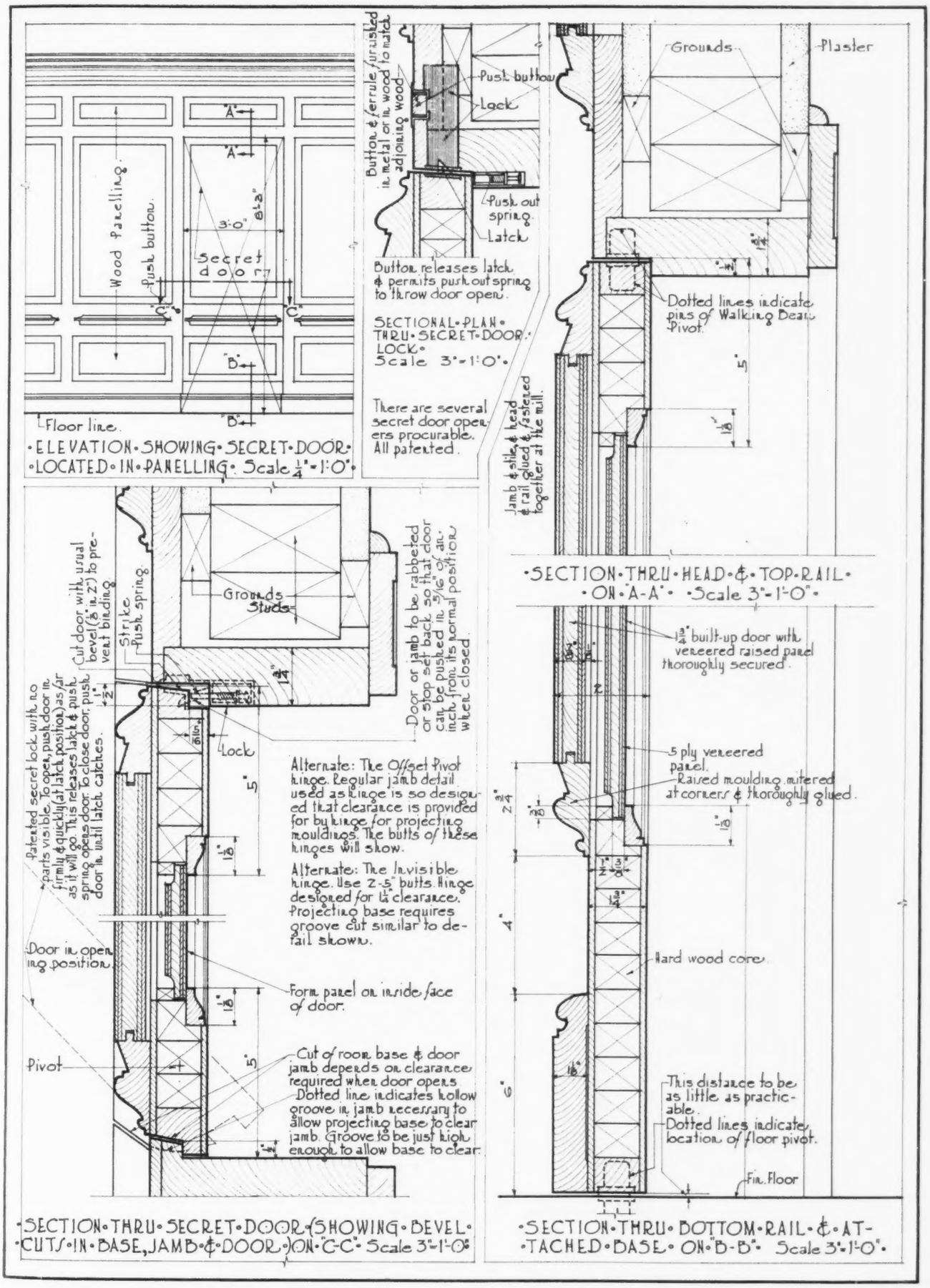
Drawing by J. L. Cerati.



Water Color Drawing by Hoyt Sherman.



By Andrew E. Egeressy—Ernest Sibley's Office, Palisade, New Jersey.
(Prize—*Class Three—October Competition*)


Wood Panelling.
Push button.
Secret door
Floor line.
ELEVATION SHOWING SECRET DOOR LOCATED IN PANELLING. Scale 1/4"=1'0"
Button & ferrule (furnished in metal or in wood to match adjoining wood)
Push button
Lock
Push out spring.
Latch
Button releases latch & permits push out spring to throw door open.
SECTIONAL PLAN THRU SECRET DOOR LOCK. Scale 3"=1'0"
There are several secret door openers procurable. All patented.
Grounds
Plaster
Dotted lines indicate pins of Walking Beam Pivot.
Jamb & stile & head & rail glued & fastened together at the mill.
SECTION THRU HEAD & TOP RAIL ON "A-A" Scale 3"=1'0"
Patented secret lock with no parts visible. To open, push door in firmly & quickly (at latch position) as far as it will go. This releases latch & push spring opens door. To close door push door in until latch catches.
Cut door with usual bevel (3° in 2") to prevent binding.
Strike
Push spring
Grounds
Studs
Door or jamb to be rabbeted or stop set back so that door can be pushed in 5/16" or an inch from its normal position when closed.
Lock
Alternate: The Offset Pivot hinge. Regular jamb detail used as hinge is so designed that clearance is provided for by hinge for projecting mouldings. The butts of these hinges will show.
Alternate: The Invisible hinge. Use 2-5" butts. Hinge designed for 1/4" clearance. Projecting base requires groove cut similar to detail shown.
Door in opening position
Form panel on inside face of door.
Pivot
Cut of room base & door jamb depends on clearance required when door opens. Dotted line indicates hollow groove in jamb necessary to allow projecting base to clear jamb. Groove to be just high enough to allow base to clear.
SECTION THRU SECRET DOOR (SHOWING BEVEL CUTS IN BASE, JAMB & DOOR) ON "C-C" Scale 3"=1'0"
1 3/4" built-up door with veneered raised panel thoroughly secured.
5 ply veneered panel.
Raised moulding mitered at corners & thoroughly glued.
Hard wood core.
This distance to be as little as practicable.
Dotted lines indicate location of floor pivot.
Fin. Floor
SECTION THRU BOTTOM RAIL & ATTACHED BASE ON "B-B" Scale 3"=1'0"

A PLATE FROM PART II OF "GOOD PRACTICE IN CONSTRUCTION."

(This book, by Philip G. Knobloch, is now in course of preparation by the Publishers of Pencil Points)

THE SPECIFICATION DESK

A Department for Specification Writers

SPECIFICATIONS

By W. W. Beach

PART XIII

STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

CONTINUING the specifications for a Consolidated District School building, we arrive at Division G, Structural Steel and, next following, Division H, Miscellaneous Metal Work. This latter division is variously termed "Ornamental Iron Work", "Stair Work" etc. Sometimes it is included with the steel, either because the steel fabricators in a locality are equipped to do the minor work as well as the structural or because the job is not large enough to warrant separation.

Assuming it advisable to have at least the two divisions of this general subject, there is likely to arise the further question as to whether or not such features as woven wire work, fences, steel sash, elevator cars and enclosures, vault door sets etc., ought to be treated separately in order to facilitate the direct dealing of the general contractor with such supply concerns, presumably to the advantage of the owner also.

These are points to be considered and disposed of in connection with any specification or to be made the rule of practice in any office. It must be borne in mind that we are not attempting here to produce a standard form of specification, except only as relates to the general conditions. Rather, are we offering forms for everyday use, limiting them to a single theoretical structure.

We thus proceed with

DIVISION G, STRUCTURAL STEEL

NOTE. (Introductory for all Divisions) The Contract and General Conditions of these Specifications, including the Supplementary General Conditions, govern all parts of the work and are parts of and apply in full force to these Specifications for Structural Steel. The Contractor shall refer thereto as forming integral parts of his Contract.

ART. 1. *SCOPE OF WORK.*

(A) THE ITEMS under this Division include:

(1) ALL STRUCTURAL STEEL, fabricated, painted and erected.

(2) ALL LOOSE LINTELS, fabricated, painted and delivered.

(3) SUCH OTHER WORK as is herein set forth.

ART. 2. *GENERAL DESCRIPTION.*

NOTE. There is here given for convenience of Contractors, a brief mention, not necessarily complete, of the work included in this Division, full description of which will be found in the specifications following, beginning with Art. 3.

(B) GIRDERS, BEAMS, RODS ETC. shall be provided and erected for support of balcony in assembly hall as shown on Sheet 19. This includes all steel in balcony framing except reinforcing bars.

(C) ALL OTHER PLATES, RODS AND STRUCTURAL STEEL, wherever required, shall be provided and erected as shown, including hangers and angles for plank walks in attic, members supporting cut stone, etc.

(D) LINTELS shall be provided for all openings in brick and tile walls where concrete lintels are not called for. Loose lintels weighing 100 lbs. or less shall be delivered to Masonry Contractor and his receipt secured for same. Larger lintels shall be properly set by Steel Contractor. Hangers and anchors shall be furnished for same, where required, and properly placed in wall (or in forms, where same are to be bedded in concrete).

(E) STAIRS, FURRING MEMBERS, CAST IRON and other steel and iron work other than structural are included under other Divisions, but this Contractor shall provide and install structural steel beams, rods etc. in floors and landings for support of stair members.

(F) CONNECTIONS FOR OTHER WORK. This Contractor shall make careful note of all connections of other work to structural members and provide proper bolt or rivet holes for same, all correctly indicated on shop drawings. Where so indicated, or conditions make necessary, he shall also provide connection angles of proper strength riveted to structural members. Rods and anchors in concrete girders over gymnasium ceiling will not be included with structural steel.

ART. 3. *STEEL.*

(A) MATERIAL. All steel shall meet the requirements of the Manufacturer's Standard Specifications as revised Apr. 22nd, 1919. Structural members shall be "Class B," rivets "Class C."

(B) SHOP DRAWINGS AND SETTING DIAGRAMS shall be submitted for approval as specified in Art. 4 of the General Conditions.

(C) FINISHED WORK shall be in accordance with approved shop drawings and shall be true and free from twists, kinks, buckles, open joints, loose rivets or bolts or other defects.

ART. 4. *FABRICATION.*

(A) FRAMING. All connections shall be as detailed or, where not specifically shown, shall be in accordance with standard specifications given in Carnegie Steel Co's. 1923 Handbook. Connection members and their riveting shall, in every case, develop the maximum strength of the minor member being framed. Abutting surfaces of compression members shall be milled and close-fitted whenever necessary to develop full stresses in those members. All abutting members in tension joints shall be cut true and square and be fitted close together.

The maximum clearance of beams framing into beams shall be 1/8". Beams connecting to columns shall extend within 1/4" of faces of columns.

(B) TRUSSES AND PLATE GIRDERS shall each be shipped in one piece unless otherwise indicated, with necessary plates. Trusses shall be built with camber as shown. Gussets shall be 1/2" thick unless otherwise shown. Filler plates shall be provided where necessary, with edges flush with other members.

(C) CUTTING AND FITTING. This Contractor shall do all necessary cutting, fitting, and drilling of his work for the accommodation of other trades and shall do what is necessary to secure correct information for same, both before and after steel is delivered...No cutting or drilling will be permitted which will impair the strength of any structural member.

(D) SUBSTITUTION. Where exact sizes and weights of steel called for are not to be had, the Contractor shall secure the Architect's approval of suitable, available sizes in time to obviate any delay due to such substitution.

(E) BEARINGS. All beams and channels 12" and over shall have at least 12" bearing at wall-ends, all others have at least 8", but in no case shall bearing be less than 2/3 the depth of bearing plates. All lintels not otherwise shown shall be at least 20" longer than widths of openings.

ART. 5. *BEARING PLATES.*

(A) IN GENERAL. All steel members bearing on masonry or concrete shall have steel bearing grillages or plates as shown, of the following sizes. Members smaller than 5" may bear direct, without plates. All plates shall be single thickness of metal.

(B) SIZES of plates, where not otherwise detailed, shall be as follows:

For 24" beams, 16" x 20" x 1".
For 18" and 20" beams and 15" No. 60 beams, 16" x 16" x 7/8".
For 15" No. 42 beams, 12" x 16" x 3/4".
For 12" beams and 15" channels, 12" x 12" x 5/8".
For 10" beams, 10" x 12" x 5/8".
For 8" and 9" beams and 10" and 12" channels 8" x 10" x 1/2".
For 7" beams and 9" channels, 8" x 8" x 1/2".
For smaller members, 6" x 8" x 3/8".
For doubled 15" beams, 20" x 20" x 1".
For doubled 10" and 12" beams, 16" x 16" x 7/8".
For doubled 8" and 9" beams, 12" x 16" x 3/4".
For doubled 6" and 7" beams, 12" x 12" x 5/8".
For doubled 10" and 12" channels, 12" x 16" x 3/4".
For doubled 8" and 9" channels, 12" x 12" x 5/8".
For doubled 6" and 7" channels, 10" x 12" x 1/2".

(C) VARIATIONS. Where bearing space will not permit the use of list size, same may be changed to other

equivalent area, with thickness increased, if necessary, to resist increased bending moment. Where beams on opposite sides of wall come closer together than 10", they shall rest on common plate, of area equivalent to combined area called for.

ART. 6. *RIVETS.*

(A) ALL SHOP CONNECTIONS shall be riveted.
(B) ALL FIELD CONNECTIONS in trusses and built-up girders and all connections of purlins to trusses shall be riveted, excepting only in certain cases where conditions make riveting impossible, when bolts may be used, but only on approval of the Superintendent.
(C) WORKMANSHIP. All rivets shall have full hemispherical heads concentric with rivet holes and in full contact with the surface. No loose or imperfect rivets will be allowed to remain in any part of the work. Hot rivets must enter holes without use of hammer. Pitch lines of rivets for all truss members at each joint must meet at a point. All riveted work shall have all parts well pinned and bolted together before riveting is commenced. When rivets have more than 1" grip, they shall be driven by a machine capable of exerting direct pressure upon the rivet. Rivet heads showing on under sides of lintels and those on bearing surfaces shall be countersunk and chipped.
(D) DIAMETERS. No rivet shall have a less diameter than thickness of member through which it passes. Rivets not otherwise specified shall be ¾" diameter.
(E) RIVET HOLES. Diameter of punch for steel less than ⅝" thick shall not be more than $\frac{1}{16}$" larger than rivet nor that of die more than ⅛" larger. Steel more than ⅝" thick, except for minor details, shall either be drilled from the solid, or else sub-punched and reamed so as to remove at least $\frac{1}{16}$" of metal.

ART. 7. *SEPARATORS.*

(A) IN GENERAL. Separators shall be provided, spaced as shown, or not more than 5'0" o. c., in each case where two or more beams or channels are grouped to form girders or lintels.
(B) PIPE SEPARATORS of proper sizes and spacing shall be used for beams and channels 5" and less.
(C) CAST IRON SEPARATORS, Carnegie standards, properly spaced, shall be used for all beams and channels larger than 5".

ART. 8. *TIE RODS AND ANCHORS.*

(A) TIE RODS shall be furnished wherever called for, of sizes shown, with ends threaded for standard nuts. Unless otherwise shown, threaded ends shall be upset so that net diameter is not reduced. Turnbuckles, where called for, shall be of approved pattern. Tie rods supporting wood members shall have heavy cast iron or steel washers or plates between nuts and wood bearing. All nuts on rods shall be screwed tight at proper level and threads cut or riveted to prevent nuts working loose.
(B) ANCHORS shall be provided on wall end of each beam over 4" deep, on all lintels and girders 8" and over and for all beams, channels, girders and trusses as indicated on drawings. Wall anchors for single beams (unless otherwise noted) shall be as shown on page 184, Carnegie 1923 Handbook. Those for pairs or more shall be standard strap-and-pin anchors, with two ¾" bolts each. Straps shall be ⅜" x 3" and pins ¾" x 8", unless otherwise shown. When beams are in line they shall be strapped together with ⅜" x 3" straps, 12" long, with two ¾" bolts in each beam. All roof beams bearing on outside walls shall have anchors extending within 4½" of outside face of wall.

ART. 9. *INSPECTION.*

(A) BEFORE DELIVERY. No specific allowance is required of Contractor to cover cost of inspection, but he shall afford the Owner's Inspectors every opportunity which they may demand for inspecting materials in mills and fabricating plants.
(B) AFTER DELIVERY, the Contractor shall afford like opportunity to the Superintendent.

ART. 10. *ERECTION.*

(A) SHIPMENT of material shall be begun, in order needed, as soon as possible after approval of shop drawings, and shall continue as rapidly as necessary to avoid delays at the building, but not to cause accumulation of more steel on premises than supply for one story.
(B) MARKING. Each separate member shall be plainly marked in protected, plainly-visible location, in accordance with reference numbers on setting diagrams.
(C) PRECAUTIONS. Every care shall be taken in shipping, hauling and unloading to avoid distorting any member. Rope slings shall be used in hoisting, placed to avoid pressure on light members. Steel on premises shall be neatly stacked in such manner as to prevent undue strains and stresses.
(D) SETTING. All steel members shall be put in place by this Contractor, except that small loose lintels and wall bearing-plates will be set by Mason. Steel Contractor shall give Mason due instructions for setting bearing plates for structural steel other than loose lintels and shall also instruct Concrete Contractor regarding placing of anchors in concrete and be responsible for same. Column base plates shall be set by Steel Contractor in 1:2 Portland cement grout, adequately filling space under plate to proper level. Grout shall be fresh when used and shall not exceed 1" thickness.
(E) SETTING, BOLTING AND RIVETING. Field connections shall be bolted or riveted as specified in Par. B of Art. 6. Threads of these bolts shall be reduced ⅛" in diameter (to prevent destruction in driving) and bolts or nuts turned to a driving fit. All rivets shall conform to specifications in Art. 6. Members shall be assembled in field without undue mauling or drifting. No drifting to enlarge unfair holes will be allowed. Minor corrections shall be made by reaming. Serious defects may not be corrected in the field, but shall be called to the attention of the Superintendent for decision as to the method of procedure. He may order new holes drilled or the member rejected and replaced, and same shall be done promptly.

ART. 11. *PAINTING.*

(A) SHOP COAT. After the steel has passed shop inspection by a Representative of the Architect, it shall be thoroughly cleaned of scale and rust and given one heavy shop coat of approved graphite paint or red lead smoothly ground in pure linseed oil, 33 lbs. to the gal. All planed or turned surfaces shall be coated with white lead mixed with tallow before shipment. All surfaces which are inaccessible after riveting, including contact surfaces, shall be painted before assembling. All members which are to be delivered to Mason to be built in shall, before delivery receive a second coat of paint as specified in Par. B following.
(B) AFTER DELIVERY. All surfaces shall receive a second coat, same as first, except that it shall be of different color graphite or, if of red lead, shall contain a sufficient percentage of lampblack, evenly mixed, to make noticeable difference in color. All abraded surfaces and all parts inaccessible after erection shall be painted before erection. No field painting will be allowed in wet or freezing weather.

DIVISION H. MISCELLANEOUS METAL WORK.

NOTE. (Same as introductory to Division G.)

ART. 1. *SCOPE OF WORK.*

(A) THE ITEMS under this Division include:
(1) ALL CAST IRON WORK.
(2) ALL STEEL STAIRS, RAILINGS AND LADDERS.
(3) ALL PROTECTION ANGLES AND PLATES.
(4) ALL GRILLS AND WIRE GUARDS.
(5) SUCH OTHER WORK as is herein set forth.

ART. 2. *GENERAL DESCRIPTION.*

NOTE. There is here given for convenience of Contractors a brief mention, not necessarily complete, of the work included in this Division, full description of which will be found in the following Specifications, beginning with Art. 3.
(A) CAST IRON manhole frames and covers shall be provided for transformer vault and coal room roof, to be delivered to concrete Workers. Flue cleanout door and cast iron lintels and cap for chimney are included under Div. D.
(B) STEEL AND IRON STAIRS, with newels, pipe rails and square steel balusters on channel stringers, shall be provided and installed in the several locations shown. Cast and wrought iron parts shall be provided for newels and rails be detailed. All structural members for stairs and platforms shall be included, except embedded structural beams adjoining stair openings in floors and landings, which are in Div. G.

(C) PIPE RAILS shall be provided and installed in connection with all stairs, both steel and concrete, and in other locations shown, including rails at windows and for guarding machinery in engine and fan rooms. Wall-rails of stairs shall be supported on bronze brackets as detailed.
(D) LADDERS shall be provided and installed for access to roof-space and in boiler room; also one provided for transformer room to be delivered to concrete Workers. Rungs, clamps and steel bands in chimney are included under Div. D.
(E) GRATINGS of steel bars shall be provided back of boilers and over areas of transformer room and fresh-air intakes and delivered to Mason to be built in.
(F) STEEL DOORS. Rolling steel door shall be provided and installed in opening between boiler and coal rooms. Steel doors and frames shall also be provided and installed for ash storage and ash dump as detailed; also an iron door to waste-paper room in basement.
(G) PROTECTION ANGLES shall be provided for curbs and scale-pit, to be built in by Mason.
(H) STEEL PLATES shall be provided as detailed for trench and pit covers in boiler room and basement; also platform and members supporting same in boiler room.
(I) CAST IRON GRILLES shall be provided and installed in radiator recesses in vestibules and corridors. Register faces for duct openings are included under "Ventilating."
(J) WOVEN WIRE guards and doors shall be provided and installed in:
(1) UPPER STORY, to enclose ladders.
(2) WOODWORKING SHOP, to form partition enclosing tool room.
(3) GYMNASIUMS, to protect inside of all windows and glass in doors and transoms.
(4) BOILER ROOM window and door openings on all elevations.
(5) TRANSFORMER VAULT. These last are to be delivered to Mason for installation.
(K) SOCKETS AND RODS, for support of equipment etc. on gymnasium ceilings, shall be provided as detailed, placed by Contractor under this Division, to be built into concrete.

MATERIALS

ART. 3. *STEEL.*

(A) GRADE. All steel shall be Manufacturers' Specifications Structural Grade, free from irregularities or imperfections of any kind.
(B) FINISH. Steel plates and other members shall be brought out of wind, shall be true and free from warp, buckle or twist and all exposed edges ground smooth. The complete work shall present a well finished appearance. Lettering on exposed rolled members shall be removed and surface left smooth.

ART. 4. *CAST IRON.*

(A) IN GENERAL. Cast iron shall be tough and gray, true to patterns, free from flaws and excessive shrinkage. It shall be cast in facing sand in best manner from perfect patterns, and with all lines, reliefs and arrises sharp and perfect.
(B) CONNECTIONS. All bolts and screw holes shall be drilled (not cored) and countersunk. Castings joined together and not rabbeted, shall have lugs and shall be fitted together with shoulders and brackets.
(C) FINISH. All exposed parts shall be smoothly finished. Castings shall be free from blow-holes, cracks, cold shuts and shall be of fine texture, unwarped and sound. Faces in contact shall be milled.
(D) REJECTION. All rejected castings shall be broken, or marked as directed by Inspector, and promptly removed and replaced.

WORKMANSHIP.

ART. 5. *IN GENERAL.*

(A) SHOP DRAWINGS. The Contractor shall submit two copies of all shop drawings, setting diagrams and schedules required for various parts of the work and also all requisite copies of Maker's illustrations and descriptions, all as specified in Art. 4 of Division A.
(B) MEASUREMENTS of all features which may be affected by construction at the building shall be checked by the Contractor and shall govern his fabrication. He shall report any serious discrepancies to the Architect and receive special instructions before proceeding with work affected. Doors and sash shall be made with proper bevels and clearances to operate without binding.
(C) PATTERNS for all cast work of newels, risers, brackets, etc., shall be furnished by the Contractor and submitted for inspection.
(D) CUTTING AND FITTING of work under this contract shall be done by this Contractor wherever necessary for accommodation of the work of other trades. He shall give the necessary information to Mason and Concrete Foremen for location of anchors and other embedded members so that these Mechanics may make proper preparations to receive same. All such members shall either be built in, calked with lead and sulphur or secured by lead expansion-shells.
(E) ASSEMBLED WORK shall have sharp bends and corners; close, invisible joints and invisible spot-welds. All welded joints shall finish same size and shape as adjoining members. All joints shall have same strength as adjoining members. Screws, rivets and bolts on exposed surfaces shall be countersunk and invisible, unless otherwise provided.
(F) HARDWARE. This Contractor shall drill, countersink, fit and reinforce his work for the attachment of hardware, all in accordance with templates to be furnished him by other trades.
(G) ANCHORS. All members shall be rigidly anchored in place. Built-in anchors shall be of ⅜" x 1 ¼" steel bars, 8" to 12" long, with ends split 4" and bent at right angles. Applied anchors shall be approved heavy lag screws in lead expansion shells. Expansion screws smaller than ⅞" shall be of brass or bronze. Anchors shall be 2' 6" o. c., unless otherwise shown. Exposed heads shall be countersunk or hexagonal, as required.
(H) INSPECTION. All work shall be subject to inspection at the shop, as well as on the job, and due notice shall be given the Architect when the various parts will be ready for inspection.

ART. 6. *STAIRS AND LADDERS.*

(A) GENERAL ARRANGEMENT of stairs, number of flights, treads, risers, newels etc. is shown on general drawings. Width of treads from face to face of risers is given on drawings, but height of all risers in each flight shall be exactly proportioned from distance between landings measured at building. Platform landings shall be included as part of stair construction where so shown, and steel plates provided for carrying concrete fillers. Terrazzo for stair treads and landings is included in Division M.
(B) DESIGN AND DETAILS of stairs shall be as shown by detail drawings. The strings shall be steel channels to which steel angle brackets shall be secured in shop ready for risers and treads to be bolted in place in the field. All newels, bearing plates, curbs, landing nosings, floor fascias and risers shall be of steel, built up as shown. Strings shall be supported on building construction and bolted to newels as detailed. Wall strings shall be anchored to wall and shall have closed end at tops of flights. Where stairs or landings cross windows, curbs and fascias shall be provided between jambs. Bent carriages and fascias shall be executed with extreme care to present a perfect appearance. Steel plates shall be provided on bottoms of channel strings wherever necessary to carry enclosing tile partitions. Bolt-heads and nuts, wherever exposed, shall be hexagonal and shall be fixed in final position.
(C) BALUSTRADES shall be as detailed, with braces and anchors as shown. Full-size detail will be furnished for steel or wrot iron braces, which shall be spaced not more than 5'0" from rail-ends and about 4'0" apart, but not more than 5'0" apart and shall furnish absolutely rigid support for rails. Hand rails shall be as specified in Par. A of Art. 7 following.
(D) SPECIAL STAIRS of steel stringers, checkered steel treads and pipe rails shall be provided as detailed, wherever called for.
(E) LADDERS shall be provided from upper story to attic and in all other locations shown. Attic ladders shall have 1½" wrot iron pipe standards and ¾" pipe rungs, 14" o. c., tapped into standards and with ⅝" rods run thru centers of rungs and tap-screwed to standards, to make ladders perfectly rigid. Standards shall be secured at bottom with flanges bedded into floor and shall be turned into brickwork at top and securely anchored. Where not otherwise detailed, stiles shall be of ½" x 1½" steel, 16" o. c., bent, rigidly anchored at top and bottom and set out 6" from wall. Rungs shall be ¾" rods, 14" o. c., securely riveted thru stiles.

ART. 7. *PIPE RAILS.*

(A) HAND RAILS shall be provided for both sides of

all concrete steps and steel or concrete stairs, except that outside rails only shall be provided for flights 3′ 3″ and less in width. Rails shall be of standard steel or wrot iron pipe, 1½″ I. D., unless otherwise shown. Free-standing rails shall be built up of posts and intermediate members with connections as shown at all intersections. Wall rails shall be bolted to bronze brackets of design shown, not more than 6′0″ o. c., rigidly secured to casings or walls. All connections to walls, floors and treads shall be by threaded socket flanges with 3 (or 4) ⅝″ bronze expansion screws each.

(B) GUARD-RAILS shall be provided to protect windows on balcony, in lantern room and in all other locations shown. These shall be of pipe specified in preceding paragraph and fitted with sockets and flanges rigidly secured to walls etc., with expansion screws, as above specified. Rails on balcony front and on dwarf partitions in balcony shall be 1¼″ O. D.

ART. 8. *STEEL DOORS.*

(A) IN GENERAL. All steel plate doors shall be provided complete as shown and detailed. They shall either be set by this Contractor or delivered to Mason to be installed by him, as case may be. All operating parts shall be in perfect working order when accepted.

(B) ROLLING STEEL DOORS shall be of approved type and make, with curtains of interlocking galvanized steel slats, spring-balanced and hand-operated by means of gear and chain at one side of opening. All details shall be submitted for approval.

(C) AS CHUTE DOOR and frame shall be provided complete with guards, wire ropes, balance weights, pulleys, handles and hinges, as shown by detail.

(D) DOOR TO WASTE-PAPER ROOM in basement shall be of No. 10 gage galv. iron with edging all round of 1¼″ x 1¼″ steel channel forming rabbet. Door shall be fitted with hasp and staple and be hung on 3 heavy galv. hinges in frame of 8″ steel channel.

ART. 9. *COVER PLATES AND GRATINGS.*

(A) TRENCH COVERS AND PLATFORMS shall be of approved checkered steel plates of thickness shown, of exact size to fit each location, no section longer than 6′ 0″. Each plate shall have a ¾″ hole near each corner and 4 loose ½″ hook handles 24″ long shall be provided. Holes shall be provided for passage of pipes and proper fitting done wherever required to match rabbets in concrete floor.

(B) GRATINGS shall be provided over areas and other locations wherever required, and in accordance with details, either fixed or hinged as stipulated, and fitted in frames, with approved anchors for concrete. Gratings over fresh-air intakes shall be 2″ x ¼″ steel bars 1½″ o. c., with line of pipe separators and ⅜″ rod thru center of each grating. Ends of bars shall be riveted to frame, which shall be 2″ x ½″ around each section, resting in rabbet of 2½″ x 2½″ x ¼″ angle, anchored to walls all around opening. Gratings shall be in sections about 6′ 0″ long, evenly divided to fit spaces. Special gratings shall be provided as detailed for transformer vault areas. Gratings shall be delivered complete at building ready to be put in place by concrete workers.

ART. 10. *PROTECTION MEMBERS.*

(A) STEEL ANGLE GUARDS shall be provided for jambs of doors where called for, of sizes shown, and fitted with split-end anchors about 4′ 0″ o. c., all delivered complete ready for Mason to put in place.

(B) STEEL EDGE ANGLES shall be provided for concrete curb and edges of pits where called for, of sizes shown, neatly bent to radius where required and fitted thruout with split-end anchors about 3′ 0″ o. c., all delivered complete, ready to be put in place by concrete workers.

ART. 11. *CAST IRON WORK.*

(A) MANHOLE, FRAMES AND COVERS shall be provided where called for and in accordance with detail, delivered at building, to be built in by concrete workers.

(B) GRILLES shall be of cast iron where so shown and shall be of highest type casting, in strict accordance with details. Models for ornamental grilles shall be submitted for approval. Each grille shall be accurately fitted and securely anchored in place in approved manner.

ART. 12 *WOVEN WIRE GUARDS.*

(A) CONSTRUCTION. All window guards shall be made of woven wire in diamond mesh, securely riveted in ⅞″ steel channel frames. Guards for doors and transoms shall be similar, but with frames of ¼″ round rods with welded connections. Wire for exterior work shall be No. 8 gage in 1¼″ mesh and for exterior work, No. 12 gage in 1½″ mesh. Wire shall be so woven as to keep frame in perfect plane and rigid rectangle, as no warped or misshapen units will be accepted. All exterior guards shall be in place by time roof is on. All window guards shall be 4″ less in height than distance between head and sill or stool, and shall be hung on narrow butts of sizes shown.

(B) EXTERIOR GUARDS shall be fitted into staff-bead rabbet (in wood or metal frames). Those 3′ 0″ wide and over shall be hung on 4″ butts, less than 3′ 0″ wide on 3½″; those 4′ 6″ high and over on 3 butts each and less than 4′ 6″ high on 2 each; all butts to be approved, heavy galv. wrot steel, with riveted brass pins; butts riveted to channel frames and screwed or tap-screwed to jambs. Each guard shall be fitted with locking device shown on detail, and provided with approved 1¼″ one-tumbler, cast-brass, spring padlock, all keyed alike; 6 brass keys to be furnished. Each lock shall be secured to guard with 8″ of heavy brass chain.

(C) INTERIOR GUARDS. All windows, transoms and sash in all parts of gymnasium shall be provided with guards, constructed in one piece for each opening. Guards for windows shall be fitted in rabbeted jambs as detailed, hinged and locked as specified in preceding paragraph, except that butts shall be bronze-plated. Guards for glass panels in doors and transoms shall be 2″ larger each way than glass size. Rods of frames shall be extended 2″ at two corners and fitted into wrot iron sockets and shall be provided with hasp and chained padlock, as specified in preceding paragraph. Each hasp and socket shall be secured with countersunk wood screws, inaccessible when guards are locked.

(D) SCREENS shall be provided where called for and of sizes shown, to enclose ladders to attic. Screens shall be 7′ 0″ high, and made of No. 8 gage wire in 1¼″ diamond mesh in ⅞″ steel channel frames. All screens shall be designed and constructed to accommodate structural conditions.

(E) WOVEN-WIRE DOORS shall be constructed as specified in Par. D and with edges finished all round with ⅛″ x ⅞″ bars secured to channels with c. s. bolts 12″ o. c. Doors shall be fitted in steel angle frames as detailed, rigidly anchored, and shall each be hung on 3 narrow 3½″ approved bronze-plated butts, and fitted with approved substantial night-latch to open with key from outside and knob from inside and protected with 6″ x 8″ No. 12 gage steel plate. All keys for such doors shall be alike. Standing door of all double doors shall have approved head and foot bolts and sockets.

ART. 13. *PAINTING AND GALVANIZING.*

(A) CLEANING. All members shall be carefully cleaned of dirt, scale and rust and opportunity given the Inspector to observe same before shop coat of paint is applied. Cast iron shall have all necessary smoothing done ready for painting.

(B) GALVANIZING. All outside wire guards shall be given an extra-heavy hot galvanizing coat after assembling and before being exposed to the weather.

(C) SHOP COAT. After all iron and steel has passed shop inspection, all, except galv. work, shall receive a heavy shop coat of approved black mineral paint. This may be applied on wire work by dipping, but shall be carefully brushed on other work.

(D) FINAL COAT of paint shall be applied before delivery on members delivered to Mason, and at building on all other work that is to be concealed. This paint shall be same as first, except that it shall be dark bronze green in color. Final coat on other members is included under Division O, Painting.

PUBLICATIONS

OF INTEREST TO THE SPECIFICATION WRITER.

Publications mentioned here will be sent free, unless otherwise noted, upon request, to readers of PENCIL POINTS *by the firm issuing them. When writing for these items please mention* PENCIL POINTS.

Hawthorne Roofing Tile, Catalog 5.—Contains many colored illustrations, details and specifications for laying Hawthorne Tiles. 16 pp. A.I.A. File 12e2. 8½ x 11. Hawthorne Roofing Tile Co., 22nd St. & 48th Ave., Cicero, Ill.

Elastica French Finishes.—Booklet on the subject of Elastica, the waterproofed stucco, containing illustrations and specification. 16 pp. 8¾ x 11½. U. S. Materials Co., 1515 Kingsbury St., Chicago, Ill.

Genasco Trinidad Lake Asphalt Mastic—"A New Floor Over Your Old".—Booklet describing its manufacture, uses, and methods of application. Illustrations, details, tables and lists of installations. 34 pp. 6 x 9. Barber Asphalt Co., 1600 Arch St., Philadelphia, Pa.

Published by the same firm, Specifications for applying Genasco Asphalt Mastic for Indoor foot and light traffic, outdoor foot and light traffic, indoor heavy traffic, outdoor heavy trucking and traffic (over concrete or other firm and stable base), cold storage (over concrete or other firm and stable base), cold storage (over foundation of wood or cork) plating rooms, acid tank rooms and floors subject to acid liquors, floors subject to severe trucking conditions and standing loads. Also specifications for Genasco Waterproofing. 8 x 10½.

Sheet Metal Cornices.—Valuable book on the subject containing many illustrations, details of typical cornice construction, blue prints and suggestions for specifications. 32 pp. 9 x 11¾. Copies will be sent free to readers of Pencil Points upon application to the Executive Secretary, The National Assn. of Sheet Metal Contractors, 608 Chestnut St., Philadelphia, Pa.

Period Adaptations for Modern Floors.—A study of the architectural and decorative values of floor treatments exemplified in rooms of period interest with notes on designing and installing of modern floors. Contains many illustrations, color plates, specification data installations and details. Handsome brochure. 60 pp. 8¾ x 11¼. United States Rubber Company, 57th St. and Broadway, New York, N. Y.

Concrete Masonry Dwelling Construction.—Architectural details and specification data for the design and construction of economical firesafe homes of Portland Cement Stucco on walls of concrete building block or tile. Also Portland Cement Stucco Exteriors for Dwellings. Architects' and builders' data covering the correct application of Portland Cement Stucco—with notes on stucco textures and colors using gray Portland Cement as a base. The Lehigh Portland Cement Company, Allentown, Pa.

French Imported Caen Stone Cement.—Attractive brochure in sepia describing and illustrating uses of Caen Stone Cement for all kinds of interior and exterior stone finish effects. Contains instructions, tests and specifications. A.I.A. File No. 21-b-3. 8½ x 11. Palmer Lime & Cement Co., 103 Park Ave., New York.

Treadlite Tile.—New series of floor tile pattern sheets showing eleven standard colors, pattern suggestions and notable interiors in which Bonded Floors have been used. Complete set sent to readers of Pencil Points upon request. Bonded Floors Company, 1421 Chestnut St., Philadelphia, Pa

Two Doors with but a Singleknob.—Folder illustrating and describing the new Singleknob Garage Door Controller. Richards-Wilcox Mfg. Co., Aurora, Ill.

Holorib Insulated Roofs.—Booklet illustrating and describing uses of this material, application, strength test, details and tables. 18 pp. 8½ x 11. Holorib, Inc., Cleveland, Ohio.

Panelouvre Architectural Data.—Catalogue in file folder—History of Panelouvre what it is, where it can be used, detailed description, detail drawings, specifications, comparative costs and costs, endorsements, installations and instructions. A.I.A. File No. 19-E-17. Ventilouvre Co., Inc., Bridgeport, Conn.

Lighting Specifications.—A.I.A. File 31F—Architectural detail plates on church, restaurant and home lighting. Complete details, illustrations and helpful ideas on direct and indirect illumination. Solves many new and difficult lighting problems and helps the architect in making lighting equipment specifications. Sent free to any architect who requests them on his own letterhead. Curtis Lighting, Inc., 1119 West Jackson Blvd., Chicago, Ill.

Garage Design Data.—A service to architects—Data Sheet No. 34 on the subject of Staggered Facades. Preceding data sheets sent upon request. Ramp Buildings Corpn., 21 East 40th St., New York.

Published by the same firm, Ramp Bulletin. Bulletin 78 contains interesting data on recommendations as to how to relieve "parking" situation in congested districts.

Galvanum.—Folder giving full information on this subject, specifications, illustrations and color samples. Goheen Corporation of New Jersey, Newark, N. J.

"Ellison" Casement Operator.—Leaflet describing this product containing illustrations and details showing method of installation and operation. International Casement Co., Jamestown, N. Y.

Architect's Handbook of Wiring Devices.—A.I.A. file No. 31-C-7. Covers subject of modern wiring devices in condensed form. Compiled by an architect for architects. 8½ x 11. Hart & Hegeman Mfg. Co., Hartford, Conn.

Aluminum Paint.—Treatise on the physical properties of aluminum paint and its uses in industry. 5½ x 8½. 20 pp. Aluminum Co. of America, Pittsburgh, Pa.

Special Purpose Hinges.—Catalog No. 42. Handbook completely covering subject with illustrations, detail drawings, tables of sizes and weights and prices. A.I.A. File No. '27bl. 8½ x 11. 25 pp. Richards-Wilcox Mfg. Co., Aurora, Ill.

Portfolio of Mantel Designs.—Photographic reproductions of mantels suitable for various uses. Post card size. Georgia Mantel Co., 15 East 40th St., New York City.

Character in Furniture.—Attractive brochure by Arthur Raymond Spencer illustrating and describing period furniture. 4½ x 6½. 24 pp. Stiff Cover. Wilhelm Furniture Co., Sturgis, Mich.

Safety Hand Lamps and Hand Lanterns.—Bulletin No. 2081 covers this line of electrical appliances. Crouse-Hinds Co., Syracuse, N. Y.

Quality Plumbing Fixtures.—Catalogue K. Handsome catalogue showing complete line of bathroom fixtures and specialties and kitchen sinks. Profusely illustrated with color plates, details, roughing in measurement, cross sections and specifications. 242 pp. 8 x 11. Buchram binding. A valuable addition to any architect's library. Thomas Maddock's Sons Company, Trenton, N. J.

Better Electric Lighting in the Home.—Bulletin on the subject indicated prepared by the engineering department of the National Lamp Works, Nela Park, Cleveland.

Published by the same firm, Factory Lighting Designs. Practical handbook for the installer of lighting equipment, Lighting Designs for Stores, Hotel Lighting.

Blue Printing Machinery, Blue Printing Accessories.—Catalogue M.-23. Contains complete listings of modern types of blue printing machinery as well as blue print room requisites. 6 x 9. 64 pp. C. F. Pease Co., 803 Franklin St., Chicago, Ill.

Published by the same firm. Catalog of Drawing Instruments covering complete line. Apply for Catalog D-25. 6 x 9. 32 pp.

Architects Hand Book No. 2.—Technical data of value to architects and builders using Peerless Built-in Furniture. Contains instructions, dimensions, uses, and full information about each piece. 8½ x 11. 30 pp. Built-In-Fixture Co., 2608 San Pablo Ave., Berkeley, Calif.

Published by the same firm, Peerless Built-In Furniture, Catalog No. 25. Contains illustrations, details, plans and much useful data. 4 x 9. 45 pp.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912,

Of PENCIL POINTS, published monthly at Stamford, Conn., for October 1, 1925.

State of New York, ss.,
County of New York

Before me, a Notary Public, in and for the State and county aforesaid, personally appeared W. V. Montgomery, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the corporation publishing Pencil Points, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, The Pencil Points Press, Inc., 19 East 24th Street, New York.

Editor, Eugene Clute, 19 East 24th Street, New York.

Managing Editor, None.

Business Manager, W. V. Montgomery, 19 East 24th Street, New York.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

The Pencil Points Press, Inc., 19 East 24th Street, New York City.

Ralph Reinhold, 19 East 24th Street, New York City.

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5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is..... (This information is required from daily publications only.)

W. V. MONTGOMERY,
Business Manager.

Sworn to and subscribed before me this eighth day of September, 1925.

[SEAL.]

G. H. SYKES,
Notary Public.
My commission expires March 30, 1926.

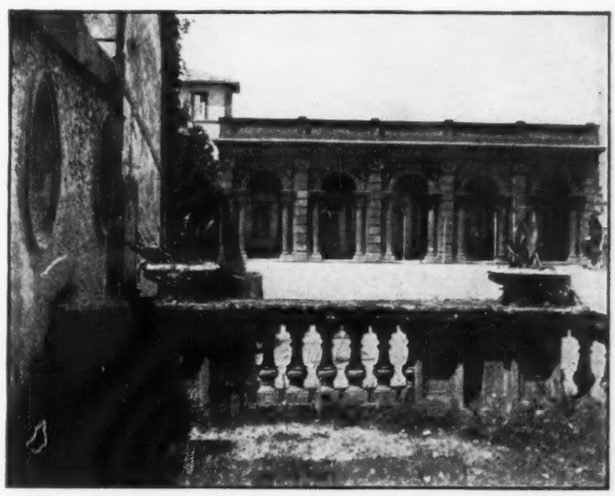
The ELDORADO PAGE

Sketching with "the master drawing pencil"

COMPOSITION—*Hints on tone placing*

THE composition of a sketch is partly determined by the artist's choice of position in relation to the subject, which offers a variety of effects when viewed from different angles. This phase of composition study is denied the student when drawing from a photograph. Here the real problem of composing begins after the drawing has been indicated in line.

Compare the sketch on this page with the photograph. The wall at the left is dark instead of light. The vine has been made light to make a more effective background for the urn. The tonal treatment of the arcade serves two purposes: the gradation from light to dark leads the interest into the picture; the white, playing up on the facade, breaks the rectangular insistence of both building and ground as they appear in the photograph. Mechanical balance, threatened by the symmetrically placed urns, is avoided by subordination of the one on the right.



THIS is No. 8 of a series of Pencil Lessons prepared by Ernest W. Watson. We will gladly send you proofs of Lessons 1, 2, 3, 4, 5, 6 and 7 on request; also additional proofs of this page and proofs of coming advertisements in this interesting pencil series. Write, too, for samples of Dixon's "Eldorado" and of Dixon's "Best" Colored Pencils. Both are supreme in their field. JOSEPH DIXON CRUCIBLE CO., Pencil Dept. 167-J, Jersey City, N. J.

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Wanted: Experienced architectural draftsman familiar with hotel and residence work. Lawrence A. Koeth, Lock Box No. 2, Davidson River, N. C.

Wanted: A capable superintendent and architectural draftsman. Must be capable of taking charge of an office and securing outside work. Must be an American at least thirty years of age. Must be willing to go to Florida. Reply at once to P. O. Box 115, Anderson, S. C.

Wanted: Experienced all around architectural draftsman. Apply, giving experience and salary expected. Position permanent to right man. Harry M. Haskell, 612 Hulett Bldg., Elmira, N. Y.

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Position Wanted: Young man, graduate of technical school with four months' experience in drafting room would like to break into structural or architectural drafting line. George Kantrowitz, 403 Saratoga Ave., Brooklyn, N. Y.

Wanted: Experienced draftsmen capable of developing complete working drawings from sketches. State age, training and experience, also salary expected. Positions reasonably permanent, working conditions excellent. Harry Barton, Greensboro, N. C.

Wanted: Experienced draftsman. Must have sufficient experience to develop complete working drawings from sketches. State age, salary expected, experience, training and qualifications, and when available. Position reasonably permanent. L. Rodman Nichols, 125 Broadway, Schenectady, N. Y.

Wanted: Architectural draftsman. At least five years' experience, Northeastern Pennsylvania, Box 200, c/o Pencil Points.

Wanted: Draftsman having several years college or atelier training, together with several years' experience, capable of making working drawings. Permanent position offered to good man. Small office. Chas. E. Keyser, 609 Minnesota Ave., Kansas City, Kans.

Draftsman wishes position in New York City, experienced on apartment house work. B. Frolich, 111 Pioneer St., Brooklyn, N. Y.

Young Man, age 20, would like position in artist's studio. Will do any necessary work. Alfred Friedland, 330 East 54th St. Brooklyn, N. Y.

Senior Draftsman, 15 years' experience, 5 years in schools, formerly with Board of Education in Buffalo and Cleveland, desires position with reliable school architects, preferably New York City. Salary $3,500. Box 201 care Pencil Points.

Technical High School Graduate, 21 years old, desires employment in an architect's office. One year's experience. Salary sufficient to live on. Vernon Stewart 193 Harmon St., Milwaukee, Wis.

Architect wants an executive position with contracting firm or in architect's office. College graduate, age 30. Have had charge during three years of contracting company's office in the south, from designing to supervising. Large experience in New York City where at present employed. Salary about $6000, according to location. Box 202, care Pencil Points.

Architectural Draftsman, married, 10 years' experience on preliminary sketches, drafting, designing and specification writing in first class architects' offices, desires to make permanent connection on salary basis with real estate or building firm building stores, apartments, etc. and requiring the services of an architect. North and east of Mississippi preferred. Box 203 care Pencil Points.

Architect, designer, seeks position, experience general, Institutional, Tropical, Gothic, and prevailing styles. Adaptable, versatile. Vicinity New York or South Box 204 care Pencil Points.

Wanted: Instructor in Architectural Design. Give complete particulars in first letter. E. Pickering, Prof. of Design, School of Applied Arts, University of Cincinnati, Cincinnati, Ohio.

Architectural Draftsman and superintendent seeks position with architect. Approximately seven and a half years' experience designing. drafting working plans and details and executive work in first class offices—and fifteen years' superintending as architects' representative. Experience covers broad field. High School and University training, specializing in architecture. Prefer Florida or California but will consider any good proposition. Best references. Box 205 care Pencil Points.

Architectural Draftsman seeks reasonably permanent position in Florida office doing high class work. Six years' experience on apartments, hotels, office buildings, schools, churches and residences. Capable of making neat and accurate working drawings from Sketches. Box 206 care Pencil Points.

Your Architectural Draftsman desires position with national concern as traveling sales representative. Fully capable, best of references furnished. Acquainted with architects in Wisconsin, Illinois, Indiana and Ohio. Box 207 care Pencil Points.

Young Man wants to get a start in architect's office. Three years college. Now studying architecture evenings at Columbia. No experience. Box 208 care Pencil Points.

Architectural Designer, graduate of European College, 2 years' experience with Chicago architects and Interior Decorators. Can make renderings in pencil and color including perspectives, $60. per week would like to locate in good office. Chicago only. Box 209 care Pencil Points.

Draftsman desires position in architect's office. Graduate of architectural school with three months' drafting experience and six months as superintendent of small residences. Salary no consideration. Box 210 care Pencil Points.

Young Man—20—desires position with architect in New York City. Technical High School graduate and 2 years at Cooper Union. No experience. Salary secondary. M. Elkind, 42 East 98th St., N. Y. C.

Draftsman, Junior, good at free hand and ornamental detail, student of Beaux Art Atelier wishes position in architectural office. One year's experience. Box 211 care Pencil Points.

First Class Architectural Draftsman and designer at present employed in Eastern Pennsylvania desires position in Florida or Southern States. Good delineator. References. Box 212 care Pencil Points.

Architectural draftsman and designer desires position in first class office in South. Neat, accurate. General experience on working drawings and details. Box 213 care Pencil Points.

Draftsman, graduate, 2 years' experience in Europe and two years in this country wants to go to southern territory. Country house work, plans, elevations, renderings and sketches in pen and ink, water color and pastel. Salary expected $40 per week. Box 214 Pencil Points.

Architectural Draftsman with experience on store designing wishes position with reliable firm. Lettering, rendering, perspectives, elevations and plans. Box 216 care Pencil Points.

Young Architect wants to rent drafting room space afternoons in architects office or in studio. Box 217 care Pencil Points.

Architectural Draftsman, Completed four years' University work good school, class "A" Beaux Arts Atelier work before and since leaving school. 5 years' experience with three good midwest and southern architects doing high grade work, accustomed to Design, Preliminary sketches and layout, sufficient experience to carry work through to completion. Age 26, married, present salary $90.00 per week in well known midwestern architectural office, desire to locate in New York City for educational reasons. Can furnish best of references. Box 215 care of Pencil Points.

Wanted: By a manufacturing company experienced draftsman capable of dissecting architect's drawings, thereby listing material of their manufacture. Box 216 care Pencil Points.

(*Other items on page* 120)